

BOSTON PUBLIC LIBRARY



3 9999 06316 120 0



957-1-11

BOSTON
PUBLIC
LIBRARY





FOURTEENTH ANNUAL REPORT

OF THE

BUREAU OF STATISTICS OF LABOR.

MARCH, 1883.



BOSTON :
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE,
1883.

C O N T E N T S .

	Page
LETTER OF TRANSMITTAL AND INTRODUCTION,	ix-xi
INDEX TO SUBJECTS,	v-viii
PART I.—EMPLOYERS' LIABILITY FOR PERSONAL INJURIES TO THEIR EMPLOYEES,	1-178
PART II.—TIME AND WAGES,	179-242
PART III.—PROFITS AND EARNINGS,	243-376
PART IV.—EARLY FACTORY LABOR IN NEW ENGLAND, . .	377-401

INDEX TO SUBJECTS.

	Page
INTRODUCTION.	
The influence of intemperance upon crime,	ix
Wages in Fall River,	ix
Price of land in Fall River,	x
Accidents upon railroads,	x
Early factory labor in New England,	xi
EMPLOYERS' LIABILITY FOR PERSONAL INJURIES TO THEIR EMPLOYEES.	
Introduction,	3
Contributory negligence,	5
Respondent superior,	5-8
Liability to employees,	8, 9
First exception to the principle,	9-16
Implied contracts,	16, 17
General laws and exceptions,	17, 18
What is the contract?	18-20
Judge-made law and public policy,	20-22
Common employment,	22, 23
Application of the rule,	23, 24
Who are fellow-employees?	24-28
Summary of the law,	28-30
LAW OF OTHER COUNTRIES, 30-36	
The Scotch law,	30-33
The Irish law,	33
The law of France,	33-35
The law of Italy,	35
The law of Prussia,	35, 36
LAW OF THE STATES AND TERRITORIES, 36-42	
California,	37
Dakota,	37
Georgia,	37
Iowa,	37, 38
Kansas,	38, 39
Mississippi,	39
Montana,	39
Rhode Island,	39, 40
Wisconsin,	40
Wyoming,	40
Missouri,	40-42

	Page
THE LAW OF ENGLAND,	42-44
Bills brought into Parliament,	44-48
The subject considered by two select committees of Parliament,	46, 47
Mr. Lowe's report,	47, 48
The committee's report,	48-51
Employers' liability act,	51, 52
Farwell v. Boston & Worcester Railroad considered,	52-54
REASONS IN SUPPORT OF THE LAW AS IT EXISTS CONSIDERED,	54-66
I. Is the servant the master's agent?	55, 56
II. Is the rule of non-liability the better policy?	56, 57
III. Does the employee take the risks of the employment?	57-59
IV. Is the price of labor proportionate to the risk of the employment?	59, 60
V. Grades of common employment,	60-62
VI. Is there need of further legislation to protect labor?	62, 63
VII. Should a contract of liability be implied?	64-66
How large employers escape liability,	66, 67
How corporations escape liability,	67, 68
Accidents upon railroads,	68-71
Are complete returns of injuries made to the Railroad Commissioners?	71-74
Probable amount of damages from a change in the law,	74, 75
Causes of injuries to railway servants,	75-79
Causes of accidents upon railroads in Massachusetts,	79-86
Railway insurance,	86-94
Infrequency of the recovery of damages,	94, 95
Should the same principle be applied to defects in machinery?	95-97
Are there any agents for whose acts the employer should be made liable?	97, 98
Should the liability be limited in amount?	98, 99
Should the employee be allowed to make a contract releasing his employer from liability?	100-103
Short history of the passage of the English bill,	103-109
The operation of the act,	109-119
Construction of the English act; decisions under it,	119-131
DECISIONS IN COUNTY COURTS UNDER THE ENGLISH ACT,	131-138
Ways, works, etc.,	131-133
Notice, defective, service, etc.,	133, 134
Who is a contractor?	134
Negligent order,	134-136
Contributory negligence,	136, 137
Actual employment necessary,	137
Employee's right to contract himself out of the act; widow and legal representatives deprived of any claim for damages,	137
What is plant?	138
Compensation,	138
Discussion of the subject in this country,	138-141
Summary of reasons and objections,	141-152
Difficulties of drawing a bill,	152, 153
The Gladstone bill,	151, 155
BILLS PRESENTED,	155-157
Bill No. I,	155, 156
Bill No. II,	156, 157

	Page
APPENDIX A. Employers' Liability Act (England),	159-162
APPENDIX B. Extracts from circular issued by Baltimore & Ohio Railroad Company, promulgating the organization of an Employees' Relief Association,	163-167
Relief and annuity features; Constitution,	168-177
By-laws of the Relief Association,	173-177

TIME AND WAGES.

Average number of employ  s; average day's wages for a skilled mechanic and ordinary laborer; hours of labor, May to November, November to May, and yearly average; months employed in each of 2,440 establishments; time employed, in months, on full time, three-quarters time, two-thirds time, half time, and idle — in the following industries :

Boots and shoes,	184-191
Boxes,	191, 192
Brick,	192
Building,	192-196
Carriages and wagons,	197-198
Clothing,	198-201
Cotton goods,	201-203
Food preparations,	204, 205
Furniture,	205, 206
Leather,	207-209
Machines and machinery,	209-212
Metals and metallic goods,	212-216
Musical instruments,	217
Paper,	217, 218
Printing and publishing,	219, 220
Rubber and elastic goods,	220, 221
Stone,	221
Tobacco,	222
Wooden goods,	222, 223
Woollen goods,	224-226
Worsted goods,	226
Average day's wage of skilled mechanics,	228-233
Average day's wage of ordinary laborers,	232-236
Average daily hours of labor, for the year,	238, 239
Average yearly working time,	238, 239
Actual average yearly working time,	241
Actual average day's earnings,	241
Actual average yearly earnings,	241

PROFITS AND EARNINGS.

Average number of employ  s; capital invested; wages paid during the year; stock used; value of product; gross profit; percentage of gross profit of value of product; estimated interest and expenses; net profit or loss; percentage of stock used of value of product; percentage of wages paid of value of product; percentage of interest and expenses of value of product; percentage of net profit or loss of value of product; average yearly product per employ  ; average yearly net profit per employ  ; and the average yearly earnings of each employ   in each of 2,440 establishments in the following industries :

Boots and shoes,	248-265
Boxes,	264-267

	Page
PROFITS AND EARNINGS — <i>Continued.</i>	
Brick,	266, 267
Building,	266-277
Carriages and wagons,	276-279
Clothing,	280-285
Cotton goods,	286-291
Food preparations,	290-295
Furniture,	294-297
Leather,	298-303
Machines and machinery,	304-309
Metals and metallic goods,	308-319
Musical instruments,	318-321
Paper,	320-323
Printing and publishing,	324-327
Rubber and elastic goods,	326-329
Stone,	328-331
Tobacco,	330, 331
Wooden goods,	330-335
Woollen goods,	334-339
Worsted goods,	340, 341
Profits and Earnings — by Cities and Towns,	344-355
Profits and Earnings — by Industries,	356-361
Employés: Men, Women, Children, and Youth — by Industries,	362-364
Employés: Men, Women, Children, and Youth — by Cities and Towns,	365
Profits, Earnings, etc., in selected Industries, Cities and Towns,	366-369
Profits and Earnings in 1875 and 1880,	370-375
The State,	370, 371
The City of Boston,	370, 371
The State, not including Boston,	370, 371
Selected Cities and Towns,	372-375
EARLY FACTORY LABOR IN NEW ENGLAND.	
Factory life, 1832 to 1848,	379, 380
Factory girls,	381
Ages of mill girls,	382
Working time,	382
Rights of mill girls,	383
Education,	383, 384
Life in the boarding-houses,	384
Circulating libraries,	385
Social and literary opportunities,	385, 386
Savings,	386
Newspapers and magazines,	386
Occupations of women,	387, 388
Rights of women,	388
Dress, morals, and health,	390
The strike in 1836,	391
Intellectual tendencies,	392
Improvement circles,	393
The "Lowell Offering,"	394
Contributors to the "Lowell Offering,"	396
Influence of early factory life on the present,	397-399
The present condition of factory labor,	399-401

Commonwealth of Massachusetts.

OFFICE OF THE BUREAU OF STATISTICS OF LABOR,
33 PEMBERTON SQUARE.

BOSTON, March 1, 1883.

HON. GEORGE A. MARDEN, *Speaker of the House of Representatives.*

Sir, — I have the honor to present to the legislature the Fourteenth Annual Report of this Bureau.

I desire to call attention to a few errors in this and in past reports.

1881. Twelfth Annual Report, p. 487. In the statement, “a total of 84+ per cent of all crime due directly or indirectly to the influence of liquor,” the word “crime” has been considered as conveying a meaning that was not intended; the intention was to state that 84+ per cent of the cases tried in the Suffolk County criminal courts were due directly or indirectly to the influence of liquor. The body of crime, if such term can be used in contradistinction to the number of offences committed, was not discussed; the report dealt only with cases. I make this explanation because the statement referred to has been used in a different connection.

1882. Thirteenth Annual Report, p. 200. In the table at the top of the page, under “Textile Industries,” giving the average yearly wages per employé, for Fall River, Lowell, and Lawrence, for 1875, the sixth line contains a serious error, so far as the figures for Fall River are concerned. The average wages for that place, in the textile industries, should have been \$332.51, instead of \$266, as stated. The average for all industries is correctly given. Our habit of retaining for a year or two all the calculations upon which tables are based, enabled us, when the average quoted was questioned, to carefully revise the original work, and by such careful refiguring an error was discovered in the

additions necessary to consolidate the wage returns of the textile corporations.

On page 236 of the same report there appears a table purporting to give the number of square feet and value per foot of land owned by the various textile corporations of Fall River. This table was made up from data specially prepared for this office by one of the assessors of Fall River, and furnished us in writing by him as a correct statement taken from the city's books. The various areas were given us in square feet, rods, and roods. The accuracy of the table was questioned and we had the whole table refigured, and found that in reducing the areas to square feet we had considered as "rods" what were undoubtedly "roods," in the cases of the following corporations: American Printing Company, American Linen Company, Annawan, Border City, Conanicut, Davol, Durfee, Fall River Manufactory, Mechanics, Merchants, Metacomet, Montaup, Quequechan, Robeson, and Tecumseh. We credited these corporations with owning 463,496 square feet, when, substituting "roods" for "rods," the product would be 7,647,484 square feet, or an excess of 7,183,988 square feet over the figure originally given.

If to the 22,607,162 square feet originally given on page 236, Report for 1882, as the quantity of land owned by the Fall River corporations, we add the deficiency above noted, we secure as a result, 29,791,150 square feet, or a little over one square mile, the whole city covering twenty-nine square miles. In the cases of the twenty other corporations we discovered no errors in our office work, and have no reason to consider them other than correct. In the cases of the fifteen corporations mentioned by name, the price of land per foot is manifestly $16\frac{1}{2}$ times too great, and should be reduced accordingly.

1883. Fourteenth Annual Report (the present), p. 150. The number of persons killed or injured on the railroads of the country and of this State, includes those killed or injured by all train accidents, including grade-crossing and all other accidents.

The thanks of the bureau are due and cordially extended to Charles G. Fall, Esq., of the Suffolk bar, who prepared

and wrote the part relating to "Employers' Liability for Personal Injuries to their Employees."

Also to Mrs. Harriet H. Robinson, for her interesting chapter on "Early Factory Labor in New England." The people who were participators in the early factory work of our State, and who are capable of writing the history of those days, are few, and are fast passing away. I have, therefore, thought it wise to preserve in the documents of the State this bit of history, contributed by so capable and so well known a writer as Mrs. Robinson.

My view of the laborious work performed by the attachés of a public office, is that whatever credit the work of such office gains should be shared by the associates of the chief. To this end I have annually called attention to the faithful services of Mr. Charles F. Pidgin, the chief clerk of the bureau, and so again I desire to thank him, Mr. H. G. Wadlin, and the other members of the staff as well. For without the faithful co-operation of each and every one, but little progress can be made in statistical work.

Very respectfully, your obedient servant,

CARROLL D. WRIGHT, *Chief*.

PART I.

EMPLOYERS' LIABILITY FOR PERSONAL INJURIES TO
THEIR EMPLOYEES.

PART I.

EMPLOYERS' LIABILITY FOR PERSONAL INJURIES TO THEIR EMPLOYEES.

The legislature of 1882 directed this bureau to investigate the subject of the liability of employers to workmen for injuries received while in the discharge of their duty, and to consider what changes, if any, were needed in the existing laws relative to such liability. A careful investigation of the law and facts which bear upon the subject has been made, and it has been fully considered in its various phases, with especial care, for the first time, so far as known, in this country. It is a subject which, in all its varied relationships, is by no means easy of comprehension. It is fruitful of embarrassments, and hedged about with difficulties, but is at the same time a question of considerable consequence to the welfare of the community. During the nine years ending with 1881, there were, according to the "Railroad Gazette," 2,372 persons killed, and 9,387 injured, in the United States, by train accidents alone, while 1,266 were killed, and 1,478 injured on the railroads of this Commonwealth by all causes, including grade-crossing accidents, car-coupling accidents, etc. A large majority of both the killed and injured were employees. Of those killed in this Commonwealth, the employees numbered 358, or more than one-quarter; of the injured, 653, or very nearly one-half, were employees. During the year 1881 alone, in this State, 72 employees were killed, and 128 injured. This sacrifice of life and limb certainly warrants such changes in the laws as may tend to prevent it.

The subject can be easily stated and plainly illustrated. It can be embodied in the simple question : Ought employees

to have the same right to recover damages for personal injuries that all others have? Should the rule of law which forbids employees from recovering damages from their employers for injuries caused by the negligence of fellow employees and without their own contributory negligence be changed? Should they be allowed, for similar injuries from the same cause, the same right to damages from their employers that the rest of the world has? If, by way of illustration, an accident should occur on a railroad train, should the brakeman have the same right to sue for damages that a passenger has? If the brakeman's arm should be broken through the carelessness of a switchman or a gate-tender, should he possess the same right that a passenger would have for a similar injury? His injury would be the same, his sufferings would be as great. He would, no doubt, be quite as much in need of relief. Nor has he been more negligent, for both were unconscious victims.

To take another illustration. Suppose two persons had been injured in a mill or manufactory through the bursting of the boiler. One was a spinner or a shoe-cutter; the other was, perhaps, a boy who had come in to sell apples and candies. Ought the spinner or the shoe-cutter to have the same right to damages as the apple-boy? They, to be sure, were in the employ of the corporation, and were injured by the carelessness of a fellow-workman in the same employ. But the engineer who neglected his duties, and caused the accident, was as unknown to them as he was to the apple-boy. Not one of them, perhaps, had ever seen the engineer. They knew nothing of his habits or his knowledge of his business; much less could they tell whether he was careful or careless, skilled or unskilled, temperate or a drunkard. Ought they all to have alike the same right to recover damages from the owners of the mill or manufactory; or ought the apple-boy to have a right of action while the spinner and the shoe-cutter have none? Ought the boy to be paid — as well as money can pay — for his broken leg, while the spinner and the shoe-cutter can receive nothing by way of compensation? Ought they to be told, when they apply at the company's office, that nothing can be done for them, and the law affords them no redress, because they and

the engineer were fellow-laborers for the same employer? These are the questions which the resolution directs the Bureau to consider, collect facts concerning, and upon which to report.

CONTRIBUTORY NEGLIGENCE.

A majority of the injuries to employees as well as to others occur through their own carelessness, and where it is not entirely due to their own carelessness it is often due to it in part. The law of some of the States allows damages to be recovered where, of the two, the person injured is more careful than the person causing the injury. But the law of this Commonwealth is so strict as to demand that the person injured shall be in the exercise of due and reasonable care, and says that when he is in the least careless, and is not in the exercise of such care, he shall not recover damages. He is then said to have consented or contributed in some way to the accident by his own lack of ordinary care. And ordinary care is defined to be such care as men of ordinary sense, prudence and capacity would take under like circumstances. The law expects a man to have his wits always about him, and declares him guilty of contributory negligence whenever, by the exercise of ordinary care, he might have prevented the injury. And it makes men who are sitting in the calm atmosphere of a court room judges of whether at the time of the accident he did what a reasonably prudent man ought to have done under the exigencies of the moment. It will not allow a man to take the risk of an injury and compel some one else to pay for the consequences. He must have been prudent and careful while the one who caused the injury was reckless and careless. And this rule of law is applied by the courts with great strictness. The application puts out of consideration, in discussing this subject, all cases where the acts of the employees have in any way contributed to the injury.

RESPONDEAT SUPERIOR.

There is a well-known principle of law which makes every man liable for his own wrong-doing or breaches of contract whenever they have caused actual or legal damage. It is

founded in natural justice, and is as well recognized and as indisputable as Kepler's Law of Areas, or the axiom of geometry that a straight line is the shortest distance between two points. And not only is every man liable for his own torts and breaches of contract, but he is liable for those of his duly authorized agent, so long as the agent acts within the scope of his authority. He is liable, to quote the words of a celebrated authority, "for the torts, negligences and other malfeasances, or misfeasances, and omissions of duty of his servant, in the course of his employment, although the principal did not authorize it, or justify or participate in, or, indeed, know of such misconduct, or even if he forbade the acts or disapproved them." It is because he has acted through and by the hand of another. The agent has been another self, who has done the bidding of his master and been guided by his mind. The complications of life are so many and so varied, the operations of business are so complex and manifold, that most of the acts of many men are done by others for them. Corporations especially are only impersonalities, and all their acts are done by agents. But these acts are none the less the acts of their principals, none the less directed by them; and the principals are none the less responsible for them. Every hand in a cotton factory that spins a thread or tends a loom under the direction of the superintendent, is the superintendent's hand. Every hand that on a railroad drives a spike or moves a lever or a switch, according to his general orders, is the superintendent's hand. Every arm that in a quarry or a coal mine holds a drill or strikes a blow, is the arm of the superintendent, so long as it obeys his will. And the superintendent is but the mouth-piece of the corporation, or his principals. Were it otherwise, any one, by employing some one else to do his bidding, could escape the consequences of his own acts. When they were to his advantage he would reap the profits; when they were to his disadvantage he could disclaim them and escape the losses.

There are many acts which can be done better by the hand of another than by the hand of their author. A vast majority of the acts done and labor performed in the mechanic arts, and in general business, are better done by agents. How

many merchants are there who could sail their ships as well as the captains whom they hire? or make the goods they sell as well as the workmen they employ? How many builders could erect a staging or frame a house? How many founders could make a mould or finish the casting? How many publishers of a newspaper could set up the type or write the editorials? How many a jeweller could cut diamonds as well as the workman he employs? And they are responsible financially, morally, legally, for the acts of their agents, whether good or bad, so long as they are done within the general scope of their authority. An express company wants, perhaps, a bundle delivered in a hurry, and, in driving through the streets, one of its employees knocks down and injures a foot-passenger who is crossing the street. A banker wants to be driven home at the close of the day's business, and his coachman carelessly runs into another gentleman's carriage. The owner of a quarry wants some stone blasted out, and one of his quarrymen, while tamping the gunpowder into the drill-hole, causes an explosion which injures a passer-by. These agents are generally able to do well what they are told to do — better able than their principals. They were acting within the scope of their agency, and simply doing what they were told to do. They were not wilfully doing wrong, and, perhaps, never before had been careless. They, and through them their principals, were bound to exercise due care always. It was a duty they owed the general public, whom they were bound to protect from harm. They have for once broken this obligation, violated the contract of safety which the law implies in every act of danger. Some one has been injured by their carelessness, and they, as well as their employers, are legally liable to make such compensation in money as a jury may award.

The reasons which are the basis of this principle of *respondet superior*, making a master liable for the negligence of his servant, may be unjust and wrong, but it is too late to controvert them now. They are as firmly grounded as the foundations of justice itself. This principle is found in the law of England as early as the reign of Charles II. The first recorded reference to it is in the second volume of "Levintz's Reports," in the case of *Michael v. Allestree*. Black-

stone enunciates the principle on page 431 of the first volume of his Commentaries ; but our ancestors might have found it among the laws of ancient Rome. *Ita scripta est.* So it is written, and so it must remain, unless the legislature would overturn the corner-stone of the law of agency. “It has long been the established law of this country,” said Lord Chelmsford, in a famous case which will be hereafter referred to, “that a master is liable to third persons for any injury or damage done through the negligence or unskilfulness of a servant acting in his master’s employ. The reason of this is that every act which is done by a servant in the course of his duty is regarded as done by his master’s orders, and consequently is the same as if it was the master’s act, according to the maxim, *Qui facit per alium facit per se.*” And this general principle is known in the civil and common law by the title *respondeat superior* — the master must respond.

LIABILITY TO EMPLOYEES.

One of the outgrowths of this principle is the liability of employers for acts of their agents which have caused personal injury to their employees. The first recorded case of this kind that has been found occurred during the magistracy of Lord Holt, who was appointed Chief Justice of the King’s Bench at the close of the English Revolution, by William and Mary ; who held this high office for twenty-one years, during three reigns, until his death, and twice refused to accept the great seal of the Lord Chancellor. The case appears in the first of Raymond, and is thus stated : “The servants of a carman ran over a boy in the streets, and maimed him by negligence, and an action was brought against the master ; and the plaintiff recovered. The servants of A, with his cart, ran against the cart of B, in which there was a pipe of wine, viz., sack, and overturned it, whereby the sack was spoiled and ran into the street : an action was brought against the master, and held good by Lord Holt, Chief Justice at Guildhall.” If Lord Holt had sought for any other reason than his natural sense of justice as a basis for his judgment, he might have found a precedent in the rule of the Roman law which made the head of the household, the *pater-familias*, responsible for the negligence of

both his servant and child, and compelled him to make compensation for their negligence, or give up the wrong-doer, whether servant or child, to the person injured. Almost every principle of law has its roots in precedents which have been growing perhaps for centuries. The roots of some principles have been growing since the birth of society. The law of agency, which makes one person responsible for the authorized acts of another, is an outgrowth of the ancient relations of master and servant. In Greece, in Rome, in Judea even, the servant was the slave of his master, over whom the latter had, under some circumstances, the *jus vitæ et necis*; the power of life and death, as well as the power of sale. And the strictness with which the master controlled his servants' acts was the reason why he was held to so strict a legal responsibility.

FIRST EXCEPTION TO THE PRINCIPLE.

It may perhaps be safely said that there is no recorded exception to this principle before 1837. The case of *Priestly v. Fowler** is the first variation from the principle which has been found. This was decided without any allusion to Lord Holt's decision. It was decided by Lord Abinger, who is better known as Sir James Scarlett, the ablest and most successful jury lawyer and verdict-getter in the annals of the English Bar, although in eloquence he was inferior to Lord Erskine. But, great as he was at the bar, like Erskine and some other celebrated advocates, he was not distinguished as a judge. The case is as follows: A butcher sent one of his men on a wagon which had been loaded by another employee, but loaded too heavily. The wagon broke down, and the man's thigh was broken. His Lordship decided that the butcher was not liable for the injury. The ground of the decision is not plain. It does not appear whether the wagon broke down because it was not in proper condition for the journey, or because it had been carelessly overloaded; and the opinion does not say whether the butcher is not liable because the law does not imply a contract of warranty as to the safe condition of the wagon, or because the law does not imply a contract to indemnify against the negligence of his servant.

* 3 M. & W. 1.

There are several instances loosely cited by way of analogy, and with the skill which advocates possess in suggesting analogies, several of which are quite as applicable to other relations as to the relation of master and servant.

It was at this period, which was one of development of patents and of mechanic arts, and of large textile factories, that railroads began to be projected. The principal railroads of England and America were in their infancy, and needed to be fostered and encouraged. Important legal questions were arising as to the liability of corporations, and old principles of law were for the first time applied to the relations of corporations towards their creditors and employees. It was almost the beginning of the centralization of large wealth and capital in great manufacturing and mechanical operations. No man was wise enough to foresee the development which was to take place, or the vast importance which might accrue to some judicial decision made to meet the exigencies of a single comparatively unimportant case. The first case, involving the rights of employees against their employers which arose in this Commonwealth, was *Farwell v. The Boston & Worcester Railroad*,* which was decided in 1842. It is this: An engine was thrown from the track and the engineer injured through the carelessness of a fellow employee in leaving the switch open. The engineer sued for damages. Charles G. Loring, a name still remembered at the Suffolk Bar, brought the suit, and contended that there was an implied stipulation in the contract of hiring between the railroad company and the engineer, "for the safety of the servant's employment, so far as the master can regulate the matter,"—a contract that the railroad company would indemnify the engineer for the negligence and want of ordinary care of its employees. The only valuable authority which was cited at the argument against this contention was *Priestly v. Fowler*, which the plaintiff admitted would have been a controlling authority had the switchman and engineer been engaged in a similar occupation. Although they were at work for the same employer, their occupations were different, dissimilar, and in every way distinct. One tended a switch on the line of the road, the other drove a locomotive

* 4 Met. 49.

over the road from Boston to Worcester. Not only were their duties unlike ; they knew nothing of each other, nothing of each other's carefulness or personal habits. So far as any knowledge of each other or so far as being engaged in a common employment was concerned, they might as well have been employed in different cities, and by different men. The Court, however, in an elaborate opinion written by Judge Shaw, followed the English precedent. The grounds of the opinion — the *ratio decidendi* — will be alluded to hereafter. It is perhaps sufficient to say here, that the Chief Justice found it unnecessary, because of the plaintiff's admission, to consider this as a case where the principle known as *Respondent Superior* should apply. But he confined the chief ground of his opinion to this point, — that there was no “implied contract of indemnity arising out of the relation of master and servant. It would be an implied promise arising from the duty of the master, to be responsible to each person employed by him in the conduct of every branch of business where two or more persons are employed, to pay all damage occasioned by the negligence of every person employed in the same service. If such duty were established by law, like that of a common carrier, to stand to all losses of goods not caused by the act of God or of a public enemy, or that of an innkeeper to be responsible in like manner for the baggage of his guests, it would be a rule of frequent and familiar occurrence, and its existence and application, with all its qualifications and restrictions, would be settled by judicial precedent. But we are of opinion that no such rule has been established, and the authorities, so far as they go, are opposed to the principle.” He then cites his authorities, one of which is *Priestly v. Fowler*,* and the other *Murray v. The South Carolina Railroad Company*.† This case is the leading authority in favor of the new rule, and contains the ablest discussion of the subject to be found in any English or American report.‡ And because the injured and the in-

* 3 M. & W. 1.

† 1 McMullan, 385.

‡ This case was not published, so says an English text-book, till after *Bartonshill Coal Company v. McGuire* was decided, which was in 1858. But it seems this is an error; for, by referring to a volume in the library of Mr. Sidney Bartlett, it appears that the 4th of Metcalf's Reports was published as early as November 9, 1843. And it is remarkable that so able an opinion, which outlined the whole theory that pervaded the English decisions, should not have been seen, or earlier referred to as a leading authority.

juring workman, in all this class of cases, work in common for the same employer, this rule, for lack of a more descriptive title, was soon called the doctrine of common employment.

The similar case of *Hayes v. The Western Railroad Corporation** arose some years afterwards. Judge B. R. Curtis was counsel for the corporation, and Judge Fletcher, who had been counsel for the railroad in the earlier case, wrote an opinion sustaining the previous authority. The same question again arose in England in 1850, in the suit of *Hutchinson v. The York, Newcastle and Berwick Railway Company*.† Although *Priestly v. Fowler* was an earlier case, this is the leading English case, properly speaking, upon this subject. Here the question was likewise decided upon the ground that there was no implied contract of indemnity between employer and employee, but an implied contract to run the ordinary risks of the service. Baron Alderson says, in his judgment: "The difficulty is as to the principle applicable to the case of several servants employed by the same master, and injury resulting to one of them from the negligence of another. In such a case, however, we are of opinion that the master is not in general responsible when he has selected persons of competent care and skill." The reason for this rule is, he says, "They have both engaged in a common service, the duties of which impose a certain risk on each of them; and, in case of negligence on the part of the others, the party injured knows that the negligence is that of his fellow-servant, and not of his master;" which seems equivalent to saying that, after being injured, he knows who injured him. "He knew when he engaged in the service that he was exposed to the risk of injury, not only from his own want of skill and care, but also from the want of it on the part of his fellow-servant; and he must be supposed to have contracted on the terms that, as between himself and his master, he would run this risk." This is an implied contract, "a risk," he says, "which Hutchinson must be taken to have agreed to run when he entered into the defendant's service." And in a single sentence he then defines both the principle and the terms of the implied contract. "The principle is that a

* 3 Cush. 270.

† 5 Exch.

servant, when he engages to serve a master, undertakes, as between himself and his master, to run all the ordinary risks of the service: and this includes the risk of negligence on the part of a fellow-servant whenever he is acting in discharge of his duty as servant of him who is common master of both." Here is the gist of this whole controversy.

On the very same day Chief Baron Pollock delivered a judgment in the case of *Wigmore v. Jay*,* in which he affirmed the same principle without carrying it further, citing *Priestly v. Fowler*, which is the only authority cited in either of these judgments. The next year *Seymour v. Maddox*, † in the court of Queen's Bench, likewise affirmed the principle, and even went so far as to decide that the manager of a theatre was not liable for damages sustained by a singer from falling through a hole in the stage. *Skipp v. The Eastern Counties Railway* ‡ followed soon after, in which the "risks incident to the service" were defined and extended by the decision that an employer was not liable for an accident caused by keeping an insufficient number of men for the work, because there was no implied contract with his employees that he would employ men enough to do the work. Baron Parke says: "The defendants were not bound to keep twenty servants; they are to be judges of the number. They are, indeed, bound to see that their servants are persons of proper care and skill." And Baron Alderson says: § "The jury are not to be judges of the sufficiency of the number of servants a man keeps. The plaintiff stayed in this situation three months without having an under-guard to assist him, and without making any objection." "He goes into the service," says Baron Parke, "and willingly incurs the danger." In 1854 *Couch v. Steel* || was decided in the Queen's Bench, which is important because it carries this doctrine to the sea, and applies it to the relation of ship-owner and seaman. This case decides that a ship-owner who "so negligently fitted out and equipped his vessel that by reason thereof she was unseaworthy, and the plaintiff was thereby obliged to undergo unreasonable labor, and was

* 5 Ex. 354; 19 L. J. Ex. 300.

† 16 Q. B. 326; 20 L. J. Q. B. 327.

‡ 9 Ex. 223; 23 L. J. Ex. 23.

§ *I*de 3 Cush. 27 *ante*.

|| 3 El. & Bl. 402; 18 Jur. 575; 23 L. J. Q. B. 121.

injured in his health," is not liable in damages. Lord Chief Justice Campbell adopts the above principle, and says, "It seems to me that there is no contract or duty disclosed in this count for a breach of which the defendant is liable," citing *Priestly v. Fowler* in support of his judgment. And Coleridge, J., added, "The plaintiff must rely on a general principle that in all such cases there is an implied contract that the vessel is seaworthy." The law of this case has been changed by a statute which compels a ship-owner to suitably fit out his ship. Seamen are wards of the State, and were taken especially under its protection, because they were notoriously careless of their lives and property; like children, easily imposed upon; and were, especially while at sea, very much at the mercy of ship-owners and their captains, and almost never in a position to make a contract upon equal terms with their employers.

It was during the next year, 1854, that *Brydon v. Stewart** was decided in the House of Lords, which laid down the rule that a master who employs workmen in occupations attended with danger is obliged to exercise due care to have the tackle and machinery he uses in a safe and suitable condition, so that his workmen shall not incur unnecessary risks. This principle was made a part of the law of this Commonwealth by the leading case on this whole subject, *Farwell v. Boston & Worcester Railroad Corporation*, † the case before cited, in which Judge Shaw, with the invaluable assistance of Mr. Charles G. Loring and Judge Merrick, took a broad and comprehensive grasp of the whole question of employers' liability for injuries to workmen; and this, too, where it was a case almost of first impression. In *Gilman v. Eastern Railroad Corporation*, ‡ Judge Gray, in a single sentence, affirms the rule. It is thus seen that as manufactures and mechanic arts are developing, as workmen are being employed in a variety of new enterprises and untried occupations, it is just and necessary that the law should, for their protection, impose upon employers additional obligations of care and circumspection. The currents of discussion in both countries run in the same direction. Any decision rendered by the English courts always receives consideration in this country, although

* 2 Macq. 30.

† 4 Met. 49.

‡ 10 Allen, 233, 238

the compliment has not until recently, with few exceptions, been freely reciprocated.

In 1858 two important cases were decided by the House of Lords. They were the cases of the Bartonshill Coal Company *v.* Reid,* and the Bartonshill Coal Company *v.* McGuire. They were Scotch appeals, brought before the House of Lords in 1856, and under consideration for two years. Both of them were brought upon similar facts,—injuries caused to miners in hoisting them from a coal-pit, by the negligence of a fellow-workman in not stopping the engineer until he had driven the cage in which they were hoisted against the scaffolding with sufficient force to throw them out. Both overruled the unanimous judgments of the Scotch judges in favor of the plaintiffs, rendered on the ground that an employer is liable to his employee for the negligence of his authorized agent, though a fellow employee. The first affirms the doctrine already laid down,—that an employer is not liable to his employee for an injury caused by the negligence of a fellow employee. It also recognizes the rule already specified, which was first laid down in *Brydon v. Stewart*,† that an employer who employs workmen in dangerous occupations is bound to exercise due care in having his tackle and machinery, his plant, in a safe and proper condition, in order that his workmen may not be exposed to unnecessary risks. And, thirdly, it seems to recognize the rule which had been already laid down in another case, *Tarrant v. Webb*,‡ as well as by the dicta of Baron Alderson in *Skipp v. The Eastern Counties Railway Company*,§ that it is the duty of the employer to exercise due care in the selection of his employees, and see that they are persons of proper care and skill, and generally competent for the work in which they are engaged. And this principle has been incorporated into the law of this Commonwealth by a line of cases, of which the leading one is *Farwell v. Boston & Worcester Railroad*.|| In *Gilman v. Eastern Railroad Corporation*,** the Court, in an opinion by Gray, J., says, “ But it is quite as well settled, both in England and America, that a master

* 3 McQueen, 266; 4 Jur. N. S. 767; 3 Mac. 300.

† 13 Macq. 30.

‡ 18 C. B. 797; 25 L. J. N. S. C. P. 263.

§ 9 Ex. 223; 23 L. J. Ex. 23.

|| 4 Met. 49.

** 10 Allen, 233, 238; and 13 Allen, 443.

is bound to use ordinary care in providing his structures and engines, and in selecting his servants, and is liable to any of their fellow servants for his negligence in this regard." The judgment in the first of these cases was delivered by Lord Cranworth, and was sustained by the judgments of Lord Brougham and Lord Chelmsford, in the second case. A similar case in this Commonwealth was *Wood v. New Bedford Coal Co.*,* which was decided in 1876.

The *ratio decidendi* of Lord Cranworth, who was then Lord Chancellor, is the same as that first announced by Chief Justice Shaw in *Farwell v. The Boston & Worcester Railroad*,† that there was no implied contract of indemnity, but a contract to run the risks of the employment. He says, "When several workmen engage to serve a master in a common work, they know, or ought to know, the risks to which they are exposing themselves, including the risks of carelessness against which their employer can not secure them; and they must be supposed to contract with reference to such risks."

IMPLIED CONTRACTS.

What is an implied contract? All contracts are either express or implied. They are either expressed in words, or implied by law. Whenever the parties have failed to express in words all the terms of a contract, which they both intended to express, the law supplies the deficiency. "Express contracts," says Blackstone, "are where the terms of the agreement are openly uttered and avowed at the time of the making—as to deliver an ox, or ten loads of timber, or to pay a stated price for certain goods. Implied are such as reason and justice dictate, and which, therefore, the law presumes that every man undertakes to perform. As, if I employ a person to do any business for me or perform any work, the law implies that I undertook or contracted to pay him as much as his labor deserves. If I take up wares from a tradesman without any agreement of price, the law concludes that I contracted to pay their real value." It is one of the fictions of the law, by which a promise is implied where none has been made; and it is a fiction which gained admission after no little opposition and delay. The judges were slow to

* 121 Mass. 252.

† 3 Met. 49.

give it their approbation, because it compelled them to assist in becoming makers of law, instead of interpreters only. It was said by Chief Justice Holt, in the eleventh year of the reign of William III., "that the notion of promises in law is a metaphysical notion, for the law makes no promise but where there is one by the party;" and as late as the third year of the reign of Queen Anne, "there is no such thing as a promise in law."

Although the doctrine by which they became a part of the law is thoroughly recognized, contracts are implied only when justice, duty, or legal obligation seem to require it. But cases where this doctrine has been applied have grown up one by one, grown up as exceptions, and contrary to the spirit of the common law; and an exception has been made only when the court thought an occasion had arisen where justice required a change. This exception, when once made, has generally stood as a precedent for other judges to follow. A page or more might be filled with instances where such a precedent has been made, which was afterwards engrafted on to the body of the law. If, for instance, a principal is obliged to pay damages in consequence of the negligence of his agent, the law implies a promise by the agent to reimburse him. Or, as has been recently been held in England,* if an agent makes a contract in the name of his principal, he impliedly contracts that he has the authority of his alleged principal; and, if he has not, that he will take the contract upon himself.

GENERAL LAWS AND EXCEPTIONS.

Such exceptions have been carefully watched and guarded against by the wisest and most prudent judges. They are like exceptions to the general principle that there must be a privity of contract between the plaintiff and defendant, in order to render the defendant liable to an action by the defendant in the contract. To this general principle there had gradually grown up in this Commonwealth various exceptions, to which the court, in a celebrated decision by Judge Metcalf,† found it necessary to put an end, by col-

* *Wright v. Follen*, 7 El. & Bl. 301, and 8 El. & Bl. 647.

† *Mullen v. Whipple*, 1 Gray, 317.

lecting and reducing the cases to three classes, and declining to allow the general principle to be further encroached upon. A general rule may sometimes work injustice. By the very terms of the definition, it is made for the generality of cases. If it does not work injustice in the majority of cases, it is about all the law can pretend to do. Laws are made for the benefit of men in the mass, and cannot be made for individual cases. A great many complaints that the law sometimes works injustice would be found unjust, if the person aggrieved would consider that, in the very nature of things, general laws can only cover the majority of cases. It is better that the law be stable and certain than vacillating and unreliable. If exceptions must be made, it is better for them to be as few as possible, unless they also form a class of cases. Legislation for individual cases is burdensome, and wrong in theory. In the very nature of government, a few must suffer wrong that justice may prevail for the majority. In a community where every man is resolved to have exact justice for himself, every man becomes a law unto himself. Anarchy must follow, or society will return to barbarism. In a well-governed society, which is thought to be the happiest social condition, every man must sacrifice something of his preferences, something of his individual rights, for the sake of the general welfare. In such a community as many general laws will be made as general welfare requires, while exceptions will be as rare as possible.

WHAT IS THE CONTRACT?

Accepting for the present, for the sake of the argument, the theory that the law implies that the employee makes a contract with his employer, the question at once arises. What is the contract? It is a contract, it is said in the decisions quoted, to run the risk of personal injury from the negligence of a fellow-employee. Now there is, it will be remembered, a fundamental principle of law, that there can be no contract without a meeting of minds, — no contract unless the parties mutually understand its terms, and mutually assent to them. When the contract is expressed, there is an actual assent; when it is implied, the assent is implied by law. Neither can there be an assent unless the

parties know to what they are assenting. It is, therefore, necessary for each party to have in mind, at the time of making the contract, the terms to which he assents. When the contract is implied, the law implies that each, at the time it was made, had its terms in his mind. Whether he had or not is a question of fact, and a question of fact based upon the ordinary experience of mankind. It is said that because workmen, when making contracts of employment, ordinarily have in mind the fact that they are to run this risk of injury from the negligence of fellow-workmen, the law should imply such a fact. This is a fact, it is said, of common experience, such a one as properly comes within the province of a jury.

With all deference to the opinions of the learned judges who declare this to be a fact of common experience, may it not still be questioned whether workmen, when engaging work, ordinarily have this fact in their minds? The law, it is true, is at present settled. But should the subject come before the legislature, it ought again to be argued upon its original merits. The same arguments should again be analyzed. The same facts which were made by the judges the basis of their opinions should again be discussed. The whole subject should be reconsidered as if it were a new question, — a question which the legislature were called upon to consider for the first time. Otherwise they would not come to a view of the subject with eyes open to the admission of all light, but influenced, perhaps, by the opinions of others.

Is there not room for grave doubt whether workmen, when making their contracts, actually consider their prospective danger of receiving personal injury? Is there not room to doubt whether their employers at such a time think of the question of liability, or ask themselves where the responsibility for damages rests should an accident occur? whether the employee runs his own risk, or is guaranteed against injury? This is a question to be decided by the common experience of ordinary men, which is the test the wisdom of centuries has established for the decision of questions of fact. Questions of fact have been left to juries, because it was thought that men familiar with business and

daily life would decide more justly than judges. Occasional flurries of excitement occur, when confidence is shaken in juries, but the great weight of public and judicial reliance upon the justice of their verdicts remains unshaken. If the common experience of ordinary men declares that the danger of injury is seldom thought of at the time of making such contracts, then the fact, which the judges have assumed as the basis of their opinions, does not exist. If, moreover, common experience declares further that workmen are not expected to run their own risks, but to look to their employers for protection, the fact is reversed, the theory falls to the ground together with the hypothesis upon which it rests, and the law should be reversed in favor of the workmen. This is the gist of the question, as presented in these opinions; and there is on both sides abundant opportunity for argument.

Were it not put upon the ground of an implied contract, but upon that of an actual contract unexpressed, a contract which could be proved in evidence by custom and usage, it would be another question based upon the same hypothesis, to be answered by a knowledge of the same fact. It would be in the end the same question, and would require the same answer. It would depend upon whether common experience declares that both workman and employer, at the time the contract to work is made, ordinarily expect the workman to take the risk, or the employer to protect him. When it is remembered that the employer is liable to every other third person for the negligence of his servant, is liable, for instance to a passenger for the negligence of an engineer in running his train, it would seem as though common experience would imply a like contract of indemnity with another servant, a brakeman, for instance, who is likewise a third person. Why should not the law create a similar contract in two cases so similar?

JUDGE-MADE LAW AND PUBLIC POLICY.

It is the province of the legislature to make law, and the province of the judiciary to interpret it. Where one class of men have had for centuries the right to declare what the law is, and have been respected for their character and held in honor for their authority, it would not be strange if

sometimes they had overstepped the boundaries of their province. Judges, like other men, are human; and the love of power, with the pleasure of using it, is one of the most natural as well as one of the strongest passions of the mind. For centuries they have administered justice, have arbitrated between their fellow-men, and been the tribunal of last appeal. From their judgment, when a court of last resort, there has been no appeal except by open rebellion. It is no wonder that they have made law sometimes, usurping the exclusive privilege of a co-ordinate branch of the government. It is no wonder that, with the growth of time, new law has grown up, and new precedents have been engrafted upon old principles misapplied; but it is never pretended that judges have the right to make law; never pretended that they have the right to invent a principle; nor can they render a decision contrary to a statute. It is seldom claimed that they can change the law as it has been laid down before their time by a superior or a co-ordinate court. But they may apply an admitted principle to a new state of facts. They may decide upon a different set of circumstances. New combinations of fact are constantly arising, and in applying to these facts a recognized principle, judges are sometimes obliged to establish new precedents. In doing this they are making new law. This is a part of their duty, and as necessary as justice itself.

Decisions are sometimes made because public policy demands it. Public policy is a general term, almost undefinable. It includes the policy of the State, and is always in harmony with good government and good morals. It is always in harmony with the genius and spirit of our laws and institutions, as they in turn are mutually in harmony with it. This is a principle used for various purposes. It is used sometimes to prevent the passage of a law, sometimes to prevent the setting up of a will. When, for instance, Daniel Webster wanted to break Stephen Girard's will, because it refused clergymen admission within the college walls, and encouraged atheism, he said it was a will made contrary to public policy. When, again, he wished to prevent the great steamboat monopoly from having, under an act of the legislature, the exclusive right to navigate the Hudson River, he argued that

such legislation was against public policy, and unconstitutional. When the anti-slavery leaders in the Senate wanted to prevent the spread of slavery to the Territories, they declared its extension to be against the public policy of the country. When Rufus Choate, in the Constitutional Convention of 1852, opposed the election of the judiciary for a term of years, he argued that the public policy of the State demanded that judges should have a life tenure, conditional upon good behavior.

These latter instances are the most common uses to which the doctrine is applied. It is the province of the legislature to decide what is or is not against public policy; and the legislature is usually jealous of any encroachment from this direction upon its ancient rights and privileges. The right to imply a contract is exercised by virtue of this doctrine of public policy. Certain contracts are implied by the courts, because they are in harmony with public policy. Certain other contracts are not implied. In the former instance the judges make a contract for the parties where they have failed to make one for themselves. They can by this means even defeat the real intention of the contracting parties. This power is exercised by virtue of the assumed rights to declare what is public policy, and to make a contract in accordance with this declaration. These certainly are extraordinary powers, which should be exercised with great circumspection, and jealously and scrupulously watched by the legislative branch of the government.

COMMON EMPLOYMENT.

The term common employment was early used to designate the employment of two or more workmen by one master. As a defence to actions for personal damages it was first applied to two persons, the person injured, and the person doing the injury, employed in a similar occupation. It was not, however, an appropriate term, because it did not suggest to the mind the principle which was the basis of this defence, but, instead, an example of the principle. It did not suggest that there was no implied contract of indemnity, but merely that both workmen were engaged to work for the same master.

As soon as the rule became recognized law in both England and America, the courts were called upon to define common employment, and say what classes of cases the term included. Having established the rule, they were asked to apply it, and say whether it should receive a wide or a narrow application. As case after case arose, they were asked to decide whether it came under the rule; whether in general the term should include only those employees who worked side by side in a similar occupation, as, for instance, masons building a wall together, carpenters erecting a staging, weavers tending adjacent looms; or whether it should have a wider scope, and embrace all employees who were hired by the same person, as, for illustration, all the hands in a factory, or all the employees of a railroad corporation. These were the limits of the application of the rule.

Between the two extremes there were various degrees where the rule might be held to include occupations more or less dissimilar. The chief question which embarrassed the courts was whether, as in the case where the rule was first announced, it should include only persons engaged in similar occupations, or should extend to any and every occupation, however dissimilar. Some courts gave it the wider, others the narrower, application. Some courts varied in their applications of the rule, and the same courts sometimes varied as new judges took the seats of their predecessors. No court attempted to actually define the term. No court attempted much more than to say that the particular case before it was one where common employment ought to be a defence to the action. Probably the term cannot be accurately defined, because it is impossible to anticipate the various kinds of employment, with their varying degrees of dissimilarity, which may arise. Several eminent authorities have declared it undefinable.

APPLICATION OF THE RULE.

If the rule of common employment had been restricted to persons at work side by side in a similar occupation, having a personal knowledge of each other's proficiency and habits of carefulness, it would not have been complained of as unjust. It might have been called a variation from a long-

established principle; and therefore wrong in theory; but it would have been so restricted in its application that it would not have been to employees a cause of severe injustice. Without great injustice it might have been made still easier for employers by excepting domestic and menial servants, such as coachmen and house servants. It is the wide extension of the rule that has done the wrong. Year by year, as case after case arose, and, through the ingenuity and persuasion of corporation counsel one court followed the example of another, the rule of common employment was gradually extended. The tendency has been of late to give it the widest extension, and include within its operation every employee who, either directly or indirectly, is paid by the same person or corporation, that is, from the same till.

WHO ARE FELLOW-EMPLOYEES?

An employee who in legal phrase is called a servant, is any person, male or female, minor or of full age, paid or unpaid, who works for another with his knowledge and consent. In the earliest case, *Priestly v. Fowler*,* which was decided in 1837, two men at work for a butcher, one of whom was injured while they were riding together in his van, were declared to be fellow-employees. Here was a similar occupation, and they had as full knowledge of each other's care and judgment in loading the van as men can generally have. In the next case, *Farwell v. The Boston & Worcester Railroad*,† which was decided in 1842, and in *Hayes v. The Western Railroad*,‡ decided in 1849, an engineer and a switchman, and two brakemen, were in the respective cases declared fellow-employees. In *Hutchinson v. The York, Newcastle and Berwick Railway Company*,§ decided in 1850, and in *Skipp v. The Eastern Counties Railway Company*, the facts were similar to the preceding. In *Albro v. The Agawam Canal*,|| decided in 1850, the rule was extended, and an operative and his superintendent were declared within the rule. In *Wiggett v. Fox*,** decided in 1856, the rule of common employment was still further extended, and said to apply to an employee of a sub-contractor, whose negli-

* 3 M. & W. 1.

§ 5 Ex. 343.

† 4 Met. 49.

|| 6 Cush. 75.

‡ 3 Cush. 270.

** 11 Ex. 832.

gence caused injury to the defendant's servant, and who was hired to do work by the piece. The wages of the employee were paid by the defendant, but he worked under the direction of the sub-contractor. The rule was followed in this Commonwealth in *Johnson v. Boston*,* decided in 1875, where one Johnson, who was injured by the caving in of a sewer, was under the "direct charge and management" of a foreman at work for the city, and under the "general supervision of the defendant's superintendent of sewers," and therefore under the general direction and control of the city, whose agent he was. In *Gilshannon v. The Stony Brook Railroad*,† a common laborer riding to his work gratuitously on the defendant's gravel-train, and the conductor of the train, through whose negligence he was injured, were declared fellow-employees. In *Brown v. Maxwell*,‡ a workman and his foreman, whose orders the former was bound to obey, and in *Sherman v. the Rochester & Syracuse Railroad Company*,§ a superintendent and an employee bound to obey the orders of the former, were called fellow-employees by the courts of New York.||

Perhaps it is not necessary to specify further cases so particularly: A hod-carrier, and the carpenter who carelessly built the staging which fell in and injured him; a baggage-master, and a draw-tender; a brakeman, and a gate-tender; a factory girl, and the superintendent who gave the very order that caused her death; a chief engineer, and the third engineer on board a steamer; a painter at work on an engine-shed, and a freight-handler who upset the ladder on which he was standing; a miner, and a workman employed by a sub-contracting engine-builder; the servant of a brewer, and a friend who gratuitously made the plans for a malt-bin, which fell in and injured the servant; a miner, and an overseer whose carelessness, while at work four miles away, caused an explosion, — have been adjudged by the courts fellow-employees. It will be seen by these decisions that the essence of common employment is a common employer and payment from a common fund.

* 118 M. 114. † 10 Cush. 228. ‡ 6 Hill, 592. § 17 N. Y. 153.

|| In *Davis v. The Central Vermont Railroad*, it has been recently held, by the Supreme Court of Vermont, that the master-builder, under whose superintendence a culvert was so negligently built that it fell in, is not a co-laborer with an ordinary employee who was injured thereby.

The strictness with which the law of fellow-servant, by means of legal refinings, has been applied, and the acuteness which has been shown in discovering a relationship between employees, is worthy of notice. The legal mind has expended, under the golden patronage of large corporations, its scholastic subtlety in extending the doctrine of common employment, until a superintendent entrusted with the entire control of the business of a large corporation, with absolute power to select and discharge his assistants, to hire or discharge fully and freely every man of the two or three thousand, perhaps, who are under him, is the fellow-servant of the boy who sweeps an office, tends a loom, couples a car, or does any service, however menial. Because this doctrine was born in this Commonwealth, and has received here the tenderest care and widest development, it is sometimes called in this country the "Massachusetts doctrine." An acknowledged authority* thinks "our courts have had a tendency to narrow the remedies for negligence by technical and unsound decisions, and especially to favor corporations at the expense of servants. If the Massachusetts doctrine should be adopted, it would afford complete immunity to a large class of employers, such as railroad companies, owners of large factories, foundries, mines, etc., who are accustomed, and indeed often compelled, to intrust the selection of almost all their servants to one or more superintendents. It would be almost impossible to prove that a superintendent had a reputation for selecting incapable subordinates, and that his employer was aware of it: yet, upon the theory which holds a general superintendent to be only a fellow-servant with those whom he employs, such proof would be necessary in order to maintain an action by one of the servants against the common employer, on account of the negligence of another servant."

Wilson v. Merry† is the leading English authority upon this subject. It is a case which arose in Scotland, and was there decided in favor of the plaintiff. The injury was produced by an explosion, caused by the negligence of an engineer employed by the defendants to sink a shaft in a coal-mine. Wilson did not know the engineer, had never seen

* Shearman and Redfield on Negligence, sect. 102.

† L. R. 1, p. 326.

him, and had no knowledge of his capacity for the work entrusted to him. The engineer was generally competent for the responsibility he had undertaken, but was so specially incompetent in this instance, that fire-damp was allowed to accumulate and cause an explosion. The case was heard in the House of Lords in 1868, and the decision of the Scotch courts overruled. The Lord Chancellor (Lord Cairns) said it was not a question of common employment, but (returning to the *ratio decidendi* of the earlier cases) a question whether there was an implied contract of liability for a servant's negligence.

This decision checked the practice, growing up in the English and Scotch courts, of discriminating between the various kinds of common employment, and returned to the principle that it was purely a question of contract, as had been laid down in *Farwell v. The Boston & Worcester Railroad*,* decided sixteen years before, and in *Hutchinson v. The York, Newcastle and Berwick Railroad*,† decided in 1850. It rejected the view that there were various grades of superior workmen, whose directions their inferiors were bound to obey: that, because their superiors were the authorized agents of their employers, their employers should be responsible for their acts. By declining to consider the various grades of similar occupations, it virtually re-asserted the wide use and construction by the English courts of the term common employment, by maintaining, in the words of Lord Cranworth, "that workmen do not cease to be fellow-workmen because they are not equal in point of authority." It furthermore destroyed the theory of the Scotch judges that whether they were fellow-workmen was a question of fact for a jury.

The Scotch judges, mindful of the injustice which they thought an indiscriminate application of the English rule would accomplish, decided that there was an important question of fact for a jury to determine. They declined to say that, as matter of law, the person who suffered the injury, and the person who caused it, were not fellow-employees, as had been decided in 1863, in the similar case of *Somerville v. Gray*.‡ They said that as there was, upon

* 4 Met. 49.

† 5 Ex. 343.

‡ 1 Macph. 768; 35 Jur. 445.

the evidence, a reasonable doubt what relations of employment existed between them, — a doubt whether an engineer who for a handsome compensation planned the work, leaving the general and special details of the execution to foremen and subordinates, was a fellow-workman with an ordinary laborer. There was an important question of fact for a jury to determine. It made no difference if the question was whether there was an implied contract between the injured servant and his employer. It was still a question of fact.

This would seem to be a just and legal solution of the difficulty. It would relieve the courts of the charge of trespassing upon the province of a jury.

It may be thought unwise for the legislature to allow juries to exercise this right. It may be said that the interests of employers would suffer, if, upon any pretence or claim of right, actions for personal injuries caused by fellow-employees could be maintained against them, because it would encourage lawsuits. If the exercise of such a right would promote litigation, — and no doubt it would, — it is no argument against the granting of the right. Should rights remain uncreated, through fear of their enforcement? If so, all courts should be abolished, or all rights should be annulled. The State is bound to protect its citizens, and provide the means of enforcing their rights. Otherwise it is a government on paper, without power, and not entitled to respect. To hesitate to confer a right, lest its exercise may annoy the wrong-doer, is unjust; and no State can ever afford to be unjust. Whatever is morally right should never be politically wrong. Every civil right has its remedy, or the right is worthless. It carries with it the right to be enforced by some appropriate action at law. The same reason which would refuse to confer a right lest it should be enforced by a suit at law, would justify the abrogation of every right that now exists.

SUMMARY OF THE LAW.

The law, as already explained, bearing upon this question of liability, may be stated in a compendious form by the following propositions: —

1st. A person is liable to pay compensation in damages

for a personal injury done to another by his own wrongful act, neglect or default.

2d. A master is liable to pay compensation in damages for a personal injury done to another person by the wrongful act, neglect or default of his servant, while engaged in the ordinary course of his employment.

3d. A master is liable to pay compensation in damages for a personal injury done to another person by the wrongful act, neglect or default of his servant, under the master's personal supervision and direction.

4th. A master is *not* liable to pay compensation in damages for a personal injury done to his own servant by the wrongful act, neglect or default of another servant, acting within the ordinary course of his employment,

(a.) Unless he has neglected to use due diligence in the selection of a competent and trusty servant, or unless, upon learning that the servant was incompetent, the master neglected for an unreasonable time to discharge him :

(b.) Unless he has neglected to use due care in selecting and furnishing suitable materials, implements, tools, machinery or plant to perform the service in which the servant who caused the injury was engaged : or unless he neglected to use due care in keeping in proper condition suitable means to perform the service in which the servant was employed.

The master's liability is not changed simply by the fact that the servant who caused the injury and the servant who was injured were engaged in a common employment.

Common employment may be said to include every servant who is hired or paid, directly or indirectly, by the same master.

The master's liability is not changed because both servants were engaged in different grades of a common employment.

Neither is it changed because the injured servant was acting at the time of the injury in strict obedience to the orders of a superior servant, a superintendent or foreman, and was injured in consequence of his obedience.

Neither is it changed because the servant who caused the injury was employed by a sub-contractor, if both were under the general direction of a superior servant of the master.

A servant or employee is liable to pay compensation in

damages for a personal injury done to another servant by his own wrongful act, neglect, or default.

A servant or employee is bound to reimburse his master or employer for damages sustained in consequence of his wrongful act, neglect, or default.

But a servant or employee who has performed his work under the eye and immediate direction of his employer, is his agent, responsible (if to any one) to his master or employer only, not to the person injured.

While the master is not liable under any contract of warranty that the materials, machinery, tools, implements, and plant are free from defects, he is liable for injury caused by any secret defects known to himself, and when unknown to the workman, not disclosed to him.

He is also liable for neglect to exercise due care in carrying on his work or business under a safe and proper system or code of regulations.

And liable for neglect to conform to any statute regulations made by the legislature for the safe conduct or management of his machinery.

To any neglect or breach of these liabilities which the law imposes, the servant may by word or act assent, and thereby excuse the master from liability to him for personal damages.

LAW OF OTHER COUNTRIES.

It may be interesting in this connection to know whether the law of other States and countries conforms to the law of this Commonwealth in excluding an employer from liability for a personal injury to an employee, caused by the negligence of a fellow-employee.

The Scotch Law.

In 1680 the earliest Scotch case arose in which the rights of master and servant were adjudicated. But the first which decided the liability of a master for his servant's tort was *Dalrymple v. McGill*,* in 1804, where it was held that a master was not liable for the act of his servant in cruelly beating another's horse, because it did not appear that he approved or had knowledge of the wrong. In 1813, in

* Hume, 292.

Linwood v. Hathorn,* the master was held liable for the act of his servant, without his knowledge or consent, in felling a tree with so little care as to cause the death of the plaintiff's intestate, who was passing. This judgment was sustained on appeal to the House of Lords. This tendency to hold the master to a strict liability for the acts of his servant was followed in *Hill v. Merricks*,† decided the same year, where he was held liable for the deliberate act of his servant in cutting down, without his master's authority, the trees of a bordering estate. So strict an obedience was exacted by masters at that time, that it was perhaps thought unwise to make it possible for them to escape liability by denying, after the injury had happened, that they had conferred any authority.

Sword v. Cameron‡ is the leading case. It was decided in 1839, the year after *Priestly v. Fowler*,§ the leading English case, and declined to follow its authority. It was an action to recover damages from the owner of a quarry, because one of his quarrymen, while carelessly blasting a rock, had injured a fellow-workman. The court unanimously held the employer responsible for the culpable negligence and rashness of his workman. The next case, which arose in 1852, is *Dixon v. Rankin*, where the master was held liable for an accident in a coal-pit; and the court, after reviewing *Priestly v. Fowler*, unanimously followed the rule of *Sword v. Cameron*. The *ratio decidendi* of the case is thus laid down by the Lord Justice Clerk:—

“The law of Scotland as to the contract of service in regard to such matters as are here raised is perfectly fixed, and admits of no doubt whatever. The master's primary obligation in every contract of service in which his workmen are employed in a hazardous and dangerous occupation for his interest and profit, is to provide for and attend to the safety of the men. That is his first and binding obligation; I should say paramount even to that of paying for their labor. This obligation includes the duty of furnishing *good and sufficient machinery and apparatus* to enable them, with safety to their lives, to perform the work which they are employed in for his profit, and to keep the same in reasonable and good condition; and the more rude and cheap the machinery, and the more liable on that account to cause injury, without great care, control, and superintendence in the working of it, the greater the obligation to make up for its defects by the attention necessary to prevent

* Shaw's Scotch App. 20. † Hume, 299. ‡ 1 S. 493. § 3 M. and W. 1.

such causing injury. In this obligation is equally included — as he cannot do everything himself — *the duty to have all acts by others whom he employs done properly and carefully in order to avoid risk.* The obligation to provide for the safety of the lives of his servants by fit machinery is not greater or more inherent in the contract than the *obligation to provide for their safety from the acts done by others whom he also employs.* The other servants are employed by him to do acts which, of course, he cannot do himself; but they are *acting for him, and instead of himself, as his hands.* For their careful and cautious attention to duty, for their neglect of precautions, by which danger to life may be caused, he is just as much responsible as for such misconduct on his own part, if he were actually working or present; and this particularly holds to the person he entrusts with the direction and control over any of his workmen, and who represents him in such a matter. The servant, then, in the contract of service in Scotland, *undertakes no risks from the dangers caused by other workmen from want of care, attention, prudence and skill which the attention and presence of the master or others acting for him, might have prevented.* His master is bound to him in obligations which are to protect him from such dangers. The principle of the contract in England being different, of course different results follow.”

In *Gray v. Brassey** the same doctrine was emphasized, and the judges again declined to follow the rule of *Priestly v. Fowler* till they had been overruled by the House of Lords. The Lord President said that the master was liable for his own negligence and the negligence of his authorized servants; and Lord Cunningham, who expressed his opinion with most vigor and positiveness, said, —

“ Although our reports for many years show that masters have been held liable to all third parties (without excepting fellow-servants) suffering from the negligence and unskilfulness of other servants hired by the employer, followed up by the late case of *Rankin v. Dixon*, in the Second Division, the books hardly show the extent of the understanding in Scotland, as *it is believed there is no man of common intelligence and experience in our affairs who entertains a different opinion.* Many industrious people may have relied on that security; and at any rate, when servants in this country have suffered severe injury from the fault of another workman hired by the master, we are not entitled suddenly to abrogate the responsibility of the latter, existing at the date of their employment. The law of Scotland on this point has been long established and acted on, while this question is new in England, arising merely under an act recently passed; and I must, with perfect deference, remark that the reasons assigned in the English cases for the distinction urged by the defender, do not appear to be altogether satisfactory or reasonable.”

* 15 Court of Sessions Cases, 135.

Five other cases followed in the same line, — Baird v. Addie,* Brownlie v. Tennant,* O'Byrne v. Burn,* Hill v. Caledonian Railway,* and Reid v. Bartonshill Coal Company, already referred to, and which, upon appeal to the House of Lords, was overruled. What had been declared law by twenty-five judges was changed by this judgment, and the law of both countries was made the same.

The Irish Law.

The Irish decisions, unlike the Scotch, follow the precedent of Priestly v. Fowler. The question was first raised in 1858, in M'Enery v. Waterford and Kilkenny Railway,† where the rule was affirmed; and all the Irish decisions uniformly accept it.

The Law of France.

This question arose in England, Scotland, and France about the same time. While the first English case was in 1837, and the first Scotch case in 1839, the first French case was in 1836. During the days of feudalism, and until the revolution of 1789, the authority exercised by the nobleman over his vassal was so great that the question would not be expected to have arisen. The development, in its various phases, of the law of master and servant, was gradual in France, as in the other countries, following likewise much the same course as the Roman law had followed. Pothier, in the “*Traité des Obligations*,” by Dupui, page 278, says that the person who appointed another to perform a function must answer for the injury caused by the agent in exercising the power with which he has been delegated; and if the agent was appointed by one or more persons, they are all liable, without exception, *in solido*. But should the agent, in a matter not connected with the exercise of the function, ill-treat or rob any one, the principal would not be liable. Nothing is said by him as to the liability of a master to his servant for the negligence of a fellow-servant, because the law had probably not reached in his day that stage of development.

The case which arose in 1836 was begun in the court at

* 16 Court of Sessions Cases, 490, 998, 1025, 569.

† 8 Ir. C., L. R. 312.

Lyons. It was an action against a master to recover damages to a workman, caused by the negligence of a fellow-workman in loading a cargo ; and the master was not held liable. A similiar decision was rendered by the local Court of Toulouse on the 26th of June, 1839, in another case, where a workman was injured through the negligence of a fellow-workman, by the glancing of a knife, while they were lopping bushes. The ground of the decision was that the servant was paid by the wages he received, for taking the risks of the employment. (See Gilbert's edition [1855] of "*Les Codes Annotés de Sirey*.") But this case was taken on appeal to the Cour de Cassation, where this decision was reversed on the 28th of June, 1841. The gist of the decision, as found in Dalloz's "*Jurisprudence Générale du Royaume*,"* is as follows : "The master is liable for the injury which one of his servants or workmen has caused by negligence to another servant or workman in a work which they were charged to carry out in common. The wages agreed upon between the servant and his master cannot exempt the latter from his liability towards the party injured."

Both of the cases were decided upon a construction of Article 1384 of the Civil Code. The sections of the code which bear upon this subject are as follows : —

"1382. Tout fait quelconque de l'homme qui cause à autrui un dommage oblige celui par la faute duquel il est arrivé à la réparer.

"1383. Chacun est responsable du dommage qu'il a causé non seulement par son fait, mais encore par sa négligence ou par son imprudence.

"1384. On est responsable non seulement du dommage que l'on cause par son propre fait, mais encore de celui qui est causé par le fait des personnes dont on doit répondre ou des choses que l'on a sous sa garde. Le père, et la mère après le décès du mari, sont responsables du dommage causé par leurs enfants mineurs habitant avec eux. Les maîtres et les commettants, du dommage causé par leurs domestiques et préposés dans les fonctions auxquelles ils les ont employés.

"Les instituteurs et les artisans, du dommage causé par les élèves et apprentis pendant le temps qu'il sont sous leur surveillance.

"La responsabilité ci-dessus a lieu à moins que les père et mère, instituteurs et artisans n'éprouvent qu'ils n'ont pu empêcher le fait qui donne lieu à cette responsabilité.

"1382. Every act of a man, of whatsoever nature, which causes injury to another, obliges him through whose fault it happened to repair the damage.

"1383. Every one is responsible for the injury he has caused, not only by his own act, but by his negligence or imprudence.

"1384. A person is liable not only for the injury he causes by his own act, but also for that which is caused by the acts of others for whom he is answerable, as well as for any injury to property under his charge.

"The father, and the mother after the death of her husband, are responsible for any damage caused by their minor children who live with them.

"Masters and employers are responsible for any injury caused by their servants or employees in performing the duties in which they have been employed.

"Teachers and artisans are responsible for any injury done by pupils or apprentices while under their care.

"The above responsibility attaches, unless the father or mother, teacher or artisan, proves that he could not prevent the act which created the responsibility."

Another construction, and an English construction of section 1384, was given by the judicial committee of the Privy Council, on appeal from the Mauritius, which is under the control of French law, in the case of *Serandiat v. Saisse*.* This in effect decides that the master (foreman or overseer) is responsible for the acts of his servant done while acting under the orders, directions, and surveillance of his master (*sous les ordres, sous la direction et la surveillance du commettant*); which is equivalent to saying, as the English law says, done while acting within the scope of his employment. It is thus seen that the Civil Code holds the employer liable for the negligence of an employee to a fellow-employee.

The Law of Italy.

The law of Italy is contained in Article No. 1153 of the Italian Code, which was modelled upon the French code; and the portion of it which relates to this subject is almost a literal translation of the French.

The Law of Prussia.

The Roman Law has been called the Common Law of Prussia. There has been no complete codification of the Laws, but from Holtzendorff's Encyclopædia, an authoritative work, it appears that the principal or employer is liable, —

1. Where he has committed or directed a wrongful act.
2. Where he should have done the work himself.
3. Where he has not used due care in the selection or supervision of his agent or employee.

*L. R., 1 P. C., 152.

Exceptions to these rules make the principal liable (1) for what is called the contractual fault of his agent; (2) make the occupier of a room liable for an injury caused by throwing out anything; (3) make innkeepers and ship-owners insurers of property intrusted to them. The employer is, in general, liable only for negligence in selecting and supervising his servant.

But, to relieve the hardship of this rule, owners of railroads, mines, quarries, pits, factories, are made liable, in certain cases, for the negligence of employees. The following is the substance of the law : —

Article 1 is as follows : “ Where, in the course of the working of a railway, a man is killed or suffers personal injury, the undertaker is liable for the damage thereby caused, so far as he does not prove that the accident was caused by *vis major*, or by the default of the person killed or injured himself.” Article 2 is : “ Where, in the case of a mine, a quarry, a pit, or a factory, the agent or the representative, or person employed to conduct or overlook the work, or the workman through his default in carrying out the work, has caused the death or the personal injury of any man, the owner is liable for the damage thereby caused.” Article 3 regulates the measure of damage. Article 5 provides that the undertaker or owner referred to in Articles 1 and 2 may not exclude or limit the application of the rules contained in the articles to their advantage, by means of a contract; that is to say, by means of a special agreement, and that contracts in contravention of this article are to have no legal effect; *i.e.*, railway companies, mining companies, factory owners, owners of quarries, etc., may not contract themselves out of the liability imposed by the law.

LAW OF THE STATES AND TERRITORIES.

A careful examination of the law of the States and Territories shows that the rule of non-liability universally prevails, except where it has been modified by local statutes. With the exception of Rhode Island, recent legislation changes the rule only as it affects the liability of railroads.

The following States and Territories have recognized the need of some change in the law : —

California. — See Codes and Statutes of California, 6971, sect. 1971; modified, however, by 6970, sect. 1970, to such an extent as to make the change of little importance.

Dakota. — See Revised Code of 1877, p. 396, Article 2, which is precisely the same as the law of California, and seems to have been copied *verbatim* from the statutes of the latter State.

Georgia. — The old law is completely changed in this State, so far as liability of railroads is concerned. The meaning of the statute is unmistakable; it reads as follows, viz., — Code of 1873, p. 521, 3036 (2981), — “Injury by co-employee. If the person injured is himself an employee of the company, and the damage was caused by another employee, and without fault or negligence on the part of the person injured, his employment by the company shall be no bar to the recovery.” The old law is laid down in 15 Ga. 349; 30 Ga. 146. The new law was enacted in 1855–56.

Iowa. — The law of this State is equally explicit in affording a remedy in like cases. Revised Code of 1880, vol. 1, p. 342, at sect. 1307, reads as follows: “Every corporation operating a railway shall be liable for all damages sustained by any person, including employees of such corporation, in consequence of the neglect of agents, or by any mismanagement of the engineers or other employees of the corporation, and in consequence of the wilful wrongs, whether of commission or omission, of such agents, engineers or other employees, when such wrongs are in any manner connected with the use and operation of any railway on or about which they shall be employed; and no contract which restricts such liability shall be legal or binding.”

The note to this section is as follows, viz.: “Under the statute, prior to the passage of chap. 169, laws of 1862, it was held, in harmony with the consent of common law authority, that the principal is not liable for damages sustained by an employee for the negligence of a co-employee in the same general service; and that the 14th section of the act, entitled An Act to grant railroad companies the right of way, approved Jan. 18, 1853, did not change the general rule on the subject.” (*Sullivan v. The M. & M. R. Co.*, 11 Iowa, 421.) After the act of 1862 took effect,

it was held that while the 7th section thereof gave an employee of a railroad company a right to recover for injuries caused by the negligence of a co-employee, the liability was nevertheless measured by a different standard and rule, as to negligence, from what it is in case of injuries to passengers. While extraordinary care and caution are required with respect to passengers, ordinary care only is due to the employee." (Hunt v. The C. & N. W. R'y Co., 26 Ia. 363; Wright, J., dissenting, and holding that under the statute the same rule applied to both. See a long list of cases in support of the new doctrine in the same note; viz., Revised Code of Iowa, 1880, vol. 1, pp. 343, 344, 345 and 346.)

Kansas. — (See Revised Laws of Kansas, 1879, p. 784, chap. 84, sect. 4914; taken from the Statutes of 1876, p. 869, sect. 4604.) The following law was passed in 1874, chap. 93, sect. 1. It took effect March 4, 1874, viz.: "Every railroad company, organized or doing business in this State, shall be liable for all damages done to any employee of such company, in consequence of any negligence of its agents, or by any mismanagement of its engineers or other employees, to any person sustaining such damage." The preceding section, 4603, while not relating to the question of damages done to an employee, is yet worth quoting, as showing the extreme caution which is required of such corporations in Kansas. It is as follows (4603, p. 869, vol. 2, Kansas Statutes): "That railroads in this State shall be liable for all damages done to person or property, when done in consequence of any neglect on the part of the railroad companies." (L. 1870, chap. 93, sect. 1.) This section has changed the law in reference to the liability of railroad companies for injuries done by their trains to cattle on the track. In an action for such injuries it is not error to instruct the jury that the company must exercise ordinary care, and is responsible for ordinary neglect. (St. Jos. & D. R'y Co. v. Grover, 11 Kansas, 302.) This section applies only where a railway company, *as a company*, has been negligent; and does not apply to negligence between co-employees of a railroad company. (Kas. P. R'y Co. v. Salmon 11 Kas. 93.) The case, just cited, Kas. P. R'y Co. v. Salmon, was decided in

1873. It was, no doubt, owing to the hardship felt in this case, that the law was changed in the following year. The jury, in the lower court, had given a verdict for \$7,500 in favor of the plaintiff, for personal injuries resulting in the death of her husband; and a new trial was refused. The case was then taken up on error, and decided against the plaintiff; and the law was changed, as before stated, the following year.

Mississippi. — See Revised Code of 1880, p. 309, sect. 1054: "Every railroad company shall be liable for all damages which may be sustained by any person in consequence of the neglect or mismanagement of any of their agents, engineers or clerks, or for the mismanagement of their engines; but for injury to any passenger upon any freight train not being intended for both passengers and freight, such company shall not be liable *except for the gross negligence of its servants.*"

Montana. — See Laws of Revised Statutes, 1879, p. 471, sect. 318: "That in every case the liability of the corporation to a servant or employee acting under the orders of his superior shall be the same in case of injury sustained by default or wrongful act of his superior, or to an employee not appointed or controlled by him, as if such servant or employee were a passenger."

The foregoing provision was enacted as part of a general act providing for the formation of railroads in the territory of Montana, and was passed with considerable difficulty over the Governor's veto. See Laws, etc., of the Territory of Montana, 1873 (extra), 104 and 109, note.

Rhode Island. — See Public Statutes of 1882, p. 553, chap. 204, sect. 15: "If the life of any person, being a passenger in any stage-coach or other conveyance, when used by common carriers, or the life of any person, whether a passenger or not, in the care of proprietors of, or common carriers by means of, railroads or steamboats, or the life of any person crossing upon a public highway with reasonable care, shall be lost by reason of the negligence or carelessness of such common carriers, proprietor or proprietors, or by the unfitness or negligence or carelessness of their servants or agents, in this State, such common carriers,

proprietor or proprietors, shall be liable to damages for the injury caused by the loss of life of such person, to be recovered by action of the case, for the benefit of the husband or widow and next of kin of the deceased person, one-half thereof to go to the husband or widow, and one-half thereof to the children of the deceased."

Wisconsin. — "Every railroad corporation shall be liable for all damages sustained by any agent or servant thereof by reason of the negligence of any other servant or agent thereof, without contributory negligence on his part, when sustained within this State, or when such agent or servant is a resident of, and his contract of employment was made in, this State; and no contract, rule or regulation between any such corporation and any agent or servant shall impair or diminish such liability." (Published March 18, 1875; approved March 4.)

Wyoming. — See Compiled Laws of Wyoming (1876), p. 512, chap. 97, sect. 1, entitled "An Act to protect railroad employees who are injured while performing their duty." "Any person in the employment of any railroad company in this Territory, who may be killed by any locomotive, car, or other rolling stock, whether in the performance of his duty or otherwise, his widow or heirs may have the same right of action for damages against such company as if said person so killed were not in the employ of said company; any agreement he may have made, whether verbal or written, to hold such company harmless or free from an action for damages in the event of such killing, shall be null and void, and shall not be admitted as testimony in behalf of said company in any action for damages which may be brought against them; and any person in the employ of said company who may be injured by any locomotive, car, or other rolling stock, of said company, or by other property of said company, shall have his action for damages against said company the same as if he were not in the employ of said company; and no agreement to the contrary shall be admitted as testimony in behalf of said company." Sect. 2. "This act shall take effect from and after its passage." (Approved December 7, 1869.)

Missouri. — Revised Statutes (1879), Vol. I., p. 349, chap.

25, sect. 2121. "Damages for injuries resulting in death in certain cases, when and by whom recoverable." "Whenever any person shall die from any injury resulting from or occasioned by the negligence, unskilfulness or criminal intent of any officer, agent, servant or employee, whilst running, conducting or managing any locomotive, car, or train of cars; or of any master, pilot, engineer, agent or employee, whilst running, conducting, or managing any steamboat, or any of the machinery thereof; or of any driver of any stage-coach, or other public conveyance, whilst in charge of the same as a driver; and when any passenger shall die from any injury resulting from or occasioned by any defect or insufficiency in any railroad or any part thereof, or in any locomotive or car, or in any steamboat or the machinery thereof, or in any stage-coach or other public conveyance, the corporation, individual or individuals, in whose employ any such officer, agent, servant, employee, master, pilot, engineer or driver shall be at the time such injury is committed, or who owns any such railroad, locomotive, car, stage-coach or other public conveyance at the time any injury is received, resulting from or occasioned by any defect or insufficiency above declared, shall forfeit and pay, for every person or passenger so dying, the sum of \$5,000, which may be sued for and recovered: First, by the husband or wife of the deceased; or, second, if there be no husband or wife, or he or she fails to sue within six months after such death, then by the minor child or children of the deceased; or, third, if such deceased be a minor and unmarried, then by the father and mother, who may join in the suit, and each shall have an equal interest in the judgment; or, if either of them be dead, then by the survivor. In suits instituted under this section, it shall be competent for the defendant, for his defence, to show that the defect or insufficiency named in this section was not of a negligent defect or insufficiency. The words 'any person' in this section do not include a fellow-servant." (64 Mo. 112, overruling 36 Mo. 13; 59 Mo. 285. See Revised Statutes, p. 350, note.)

Although at first sight this law would seem to afford a remedy for injuries sustained by a servant, and was quoted

during the discussion in England to show that Missouri had changed the rule of the common law, the Court of Appeals has decided (one judge dissenting) that the phrase "any person" does not include fellow-servant, and that his remedy (see cases above cited) remains the same as it was before the statute was passed.

It is thus seen that out of the whole number of States and Territories there are at least six of the former, viz., Georgia, Iowa, Kansas, Mississippi, Rhode Island, and Wisconsin; and two of the latter, viz., Montana and Wyoming, which have entirely abandoned the old rule, and provided a remedy by statute for the better protection of railroad employees; while there are two others, viz., California and Dakota, which have recently passed statutes defining the limit of liability.

The Law of England.

On the 7th of September, 1880, Parliament changed the law of England by passing the Employers' Liability Act (43 and 44 Victoria, chap. 42). The act was one fruit of the agitation of the rights and hardships of workingmen which has been in progress there for many years. The Corn Law agitation, which made Richard Cobden and John Bright two of the worst hated and best beloved of Englishmen, besides relieving the necessities of the poor, prepared the public mind for a more general discussion of the rights of labor, and taught workingmen everywhere to assert and defend their rights by systematic organization. Trades unions began to make the laborer's influence felt, began to aid or counteract the power of the conservative press and magazines. The right of petition to Parliament, which in the hands of John Pym was so effective, in the hands of Bright and Cobden, Thomas Brassey and Macdonald, was powerless. The ease with which monster petitions are obtained, by means of quick communication through the agency of railroads and the post, has made a petition an almost worthless catalogue of names.

By means of organization, and the mutual sympathy and courage gained by association and the discussion of grievances; by means of public meetings; by protective union leagues, and strikes, so called; by enlisting the influence of

public-spirited leaders whose hearts were tender to the wrongs and sufferings of poverty; by refusing to vote, wherever the right existed, for any member of Parliament who would not advocate their cause; by various other means, — some of which were wise, while others were unwise, — the workingmen obtained the aid of public opinion, and compelled the English government to stand and listen. All that a just cause requires is the privilege of being heard. As the result of this popular but peaceful uprising, some of their grievances have been alleviated, and some of their wrongs have been righted. They have now more reasonable hours of labor, and wages more proportionate to the labor done. Miners have been protected in various ways. Railway corporations have been brought to a more strict accountability to the public for the safety and convenience of their patrons. A few of the outposts in the great political battlefield of this generation between labor and capital, between the common people and great monopolies, have been taken, and an example set to the world of what political organization can accomplish.

The question under discussion, which, like the question of tenant right now agitating Great Britain, is an outgrowth of this general awakening to the rights of labor, and the absolute necessity of protecting the laborer, has been before the people for several years. The explosions occurring so frequently in mines, — explosions by which miners were killed sometimes by scores, — the frequency of accidents upon railways, — collisions amounting sometimes almost to disasters, — the more accurate knowledge of the number of persons annually killed in the ordinary prosecution of dangerous employments, which was furnished by the reports of the Board of Trade, — helped to awaken the public mind to the urgency of affording more ample protection, especially to miners and railway employees. The subject was at first presented to the public, as is usual, by writers for the magazines. It was then taken up by the daily press. It soon found its way into Parliament, where at first it attracted but little attention. The Social Science Association took it up for discussion. One of the earliest to write about it was Mr. Joseph Brown, a Queen's counsel, who, however,

took a rather conservative ground. Mr. Bulwer and Mr. Commissioner Miller, both of whom are also Queen's counsel, took an interest in it; but the lawyers, as usual, were rather conservative. Lord Shand, Mr. Thomas Brassey, Sir Henry Jackson, Mr. Samuel Morley, the Earl De la Warr, Mr. Knowles, Sir Daniel Gooch, Mr. Shaw Lefevre, all of whom were members of Parliament, took an earnest interest in the subject, and wrote or spoke upon it. Mr. Lowe, now Lord Sherbrooke, was the leader of the cause in Parliament, while Mr. Frederick W. Evans and Mr. Macdonald, for whose services in behalf of workingmen they are about to erect a statue, were among the chief promoters.

As soon as the subject attracted sufficient attention in Parliament, the lobby was against it, and the attorneys for the railway, mining, and large manufacturing corporations and associations, also appeared in opposition. But the cause gradually gained friends; and the more they opposed it, the more popular it became with the people and their representatives. Among the friends of the measure there was a difference of opinion as to what should be the wording of the bill. Agreeing as to the end, they differed as to the means.

BILLS BROUGHT INTO PARLIAMENT.

Of the several bills brought into Parliament, one was introduced by Mr. Macdonald. By this it was proposed to do away with the defence of common employment, and allow an employee to recover damages as other persons can. The bill was applicable to mines, manufactures, collieries, railways, and to every employment, not excepting even domestic and menial service. If the butler trod upon the housemaid's toes, or spilled kerosene oil over the gardener's trousers; if the coachman, while driving the cook to church on a rainy day, carelessly tipped over the carriage and spilled her out; or if the housemaid left a coal-hod at the top of the stairs, over which the butler tumbled when coming down on a dark morning, — liability would attach to their employer. Had this bill excluded from its operation domestic and menial servants; had the cook, coachman, butler, gardener, housemaid, seamstress, — all servants who live under the employer's roof, and become intimately acquainted with each other's

habits, — been excepted from its operation, its chief objectionable feature would have been omitted. It would then have applied only to those servants, employees, or agents who are engaged in commercial, manufacturing, business employments, hazardous operations for profit, where this danger of loss may be taken as one of the liabilities incident to the carrying on of business.

Another bill was introduced by Earl de la Warr, one provision of which made employers liable for the acts of their duly authorized superintendents, foremen, overseers, managers, or whomsoever had the right to give orders and direct the persons injured. The theory of this provision is, that because the injury is caused by obeying the orders, commands, or directions of a foreman or superintendent, whom the person injured is bound by his contract of service to obey, the employer should suffer the consequences of his agent's negligence.

Another provision made the employer a warrantor of the tools and machinery he uses, liable for any secret flaws or defects, imperfections of design, etc., which may exist. The theory of this is, that, as one of them must take the risk of defect, the person who buys the tools, machinery, and plant, who can accept or reject them, who can order them repaired when unsafe or worn out, have them removed and replaced, is the one to take the risk. By the law, as it is at present, he is only bound to use ordinary care in selecting, constructing, examining, designing; he does not warrant the soundness of the materials used, or the suitableness of the design. (See *Skerritt v. Scallan*,* and *Shearman and Redfield on Negligence*.) If, through a defect in the shaft, an engine breaks down, or, through a defect in design or construction, a bridge gives way, as at *Ashtabula*, he would not be liable. This bill would, however, make the railroad liable to both employees and passengers, by virtually saying that the person or company who builds or pays for the engine or bridge, who has the right to examine, test, inspect, accept, or reject, shall take the risk, instead of the too trusting employee or passenger. It likewise, perhaps, extended, as did the former bill, the liability for the acts of domestic and menial servants.

* 11 I. R., C. L. 389, sects. 86, 87.

A third bill which was introduced was endorsed by Mr. Brassey, Mr. Morley, Mr. Michael Bass, and Mr. Sullivan. It contained the same provisions as the preceding, except the last, and limited common employment to any manufacture, trade or business carried on for profit.

A fourth bill was brought in by the Attorney General, which was supposed to represent the views of the Gladstone ministry. This was the least radical of all, and seemed intended to carry out the views expressed in the Report of the Parliamentary Committee. None of them contained any clause allowing an employer to make a contract exempting himself from the liabilities imposed by each bill.

The Subject considered by Two Select Committees of Parliament.

The English Parliament, in the session of 1875-6, appointed a select committee to consider this subject, another in 1877, and, later still, other committees. The first consisted of fifteen members, and included Sir John Holker (then Attorney General), Mr. Lowe (now Lord Sherbrooke), Mr. Wyndham, Sir Henry Jackson, Mr. W. Stanhope, Shaw Lefevre, Sir Daniel Gooch, and Mr. Macdonald, and had full power to send for persons and papers. They began their session with an earnest desire to understand the subject; and, during the summer of 1876, summoned before them the men best informed upon the subject in the kingdom, — parliamentary agents for trades unions, barristers who had made the subject in all its bearings a special study, and were familiar with the law and its workings, secretaries of associations of railway employees, and builders. As they were unable to complete their work during that session, they reported the evidence in print, and recommended a further investigation.

The subject was again taken up at the next session, and most of the same members were re-appointed on the select committee. At this session, master builders, large employers of labor, secretaries and agents of associations of miners, proprietors of large mines, some of the ablest mining engineers in the country, managers of large collieries, chairmen of mining associations, managing directors of extensive

iron and coal companies, Lord Justices of the Court of Appeal, — Mr. Justice Bramwell and Mr. Justice Brett, — parliamentary solicitors, managers of the London and North Western, Great Western, and Great Northern Railways, Kidderminster carpet manufacturers, managing directors of locomotive works, and others, to the number, in all, of twenty-eight, gave their testimony. The examination of the witnesses was generally conducted by Mr. Lowe, each member of the committee asking whatever questions he chose.

Mr. Lowe's Report.

Two draft reports were submitted for adoption by the committees, one by Mr. Lowe, the other by Sir Henry Jackson. After laying down the universally accepted principle expressed by the maxim, *Qui facit per alium facit per se*, he says : —

“6. Your committee are warranted, by the evidence of the eminent judges and barristers examined before them, in regarding these judicial innovations with the utmost jealousy and dissatisfaction. They observe with some surprise that the common law, as it was believed to be up to 1837, has been entirely altered by judicial decision; and that not in any abstruse or remote point, but in a matter which most nearly concerns the interests of hundreds and thousands of Her Majesty's subjects.

“7. This has been effected by means which appear to the committee to be of the most questionable nature, — the inventing and enforcing a contract which never really existed. Where, beside what is expressed in a contract, there is something else in the contemplation of both parties which they would have expressed had either party required it, the committee can understand that the courts of law may be perfectly justified in saying that such a contract must be taken to have been entered into. But, so far from this being the case, the contract which the judges have assumed to be entered into by every operative, involving as it does the cession of most important rights without any consideration, is utterly unknown to the person to be bound by it, and was in its full extent, as will presently appear, unknown to the judges themselves.

“8. Lord Justice Bramwell remarks, ‘that the expression which has been used, that a servant contracts that he will make no claim against the master for injury done by the negligence of a fellow-servant, is an unfortunate one. The obvious difficulty in that mode of expressing it is, that neither master nor servant ever think of such a matter when they enter into the relation of master and servant.’ Justice Brett says (Question 1919), ‘I say now that the law is that you cannot properly import any condition or stipulation into a contract, except one which

in the minds of all reasonable men must have been in the contemplation and intention of both parties to the contract at the time it was made.'

"9. Another hardship connected with the proceedings of the judges is the gradual expansion of the contract which they created. They held that a fellow-servant could not by his carelessness impose any liability on his master; and then the question became all-important, who was a fellow-servant? By degrees it has been held that every one except the master in an industrial undertaking is a fellow-servant with every other person employed in any capacity; thus the implied contract has swelled gradually, till the term fellow-servant is no longer required, and the rule may be stated thus: The master is liable for his own personal negligence, and for no other. Had the court foreseen this result, all discussion as to what constitutes a common employment would have been unnecessary.

"10. Had the law been laid down at once in the full extent to which it has gradually advanced, public attention would doubtless have been awakened, and the whole question fairly considered by Parliament; but the doctrine has been expanding for thirty-five years, and has only just reached its full development in the Court of Sessions in Scotland, to the effect that the servants of a contractor are the fellow-servants of the servants of the person with whom he contracts.

"11. The question for the committee is, how they are to deal with a state of things which Justice Brett fairly describes as a bad exception to a bad law. Shall they maintain the exception on account of the badness of the law, or fall back on the law on account of the badness of the exception; or shall they seek some middle course, which may extricate them from both?

* * * * *

"15. The committee, therefore, recommend that the funds of every industrial undertaking shall be liable to compensate any person employed in such undertaking for any injury he may receive by reason of the negligence of any person exercising authority mediately or immediately derived from the owners of such undertaking, with this qualification, that the liability to indemnify shall not extend to persons who, though exercising authority, are *bona fide* employed in actual labor as distinguished from superintendence."

* * * * *

The Committee's Report.

The draft report of Sir Henry Jackson, less radical than Mr. Lowe's, was substantially adopted, and signed by a majority of the committee. The report is as follows:—

"1. The questions referred to your committee, though apparently two, are in reality but different modes of presenting one and the same inquiry; and they can hardly be considered apart from the much larger question of the nature and extent of the liability of employers for injuries to their servants in the course of their employment.

"2. At present a master is not liable for any injury which arises from the act or default of any fellow-servant, whether that fellow-servant be in a position of authority or not; and in ascertaining whether the person to whose act or default the injury is due is a fellow-servant, the widest possible construction is given to the term, 'Common Employment.'

"3. That a man should be liable for injury occasioned by his own act, neglect or permission, is obviously just. That a man should be liable for injury occasioned by acts which he has neither done or permitted, which have resulted from no neglect of his, or in disobedience to his order, or which he may have forbidden, is a result the justice of which it is not easy at once to recognize, and one which some eminent lawyers do not hesitate to describe as 'essentially unjust.' Such, however, is, and since the reign of Charles the Second, appears to have been, the law of this country as to injuries occasioned by servants in the course of their employment to persons not in the same employment. For such injuries the master employing the servant is liable, notwithstanding that the acts which occasioned them may not have been ordered or authorized, or may even have been forbidden.

"4. There is a strong concurrence of authority against the justice of this law, though there seems to be some difference of opinion as to its origin and historical development. Some regard it as having been established on considerations of policy, as distinguished from justice; others as a mistaken application of the maxim, *Qui facit per alium facit per se*. A very slight examination of the principle involved in this maxim, which obviously relates to agency, will show that it is inapplicable to cases where the act causing the injury is done either without authority, or in defiance of it. The probability is, that the rule was an application of the maxim *respondet superior*; and this probability is increased by the consideration that none of the decisions which have explained and determined the law have ever extended it beyond the limits to which that maxim would properly apply. The state of society in which the maxim *respondet superior* obtained, had passed away long before the English law was established; but there is a certain analogy, so far as affects third parties, between the position of a master hiring servants, and a master or *paterfamilias* employing his slaves or children. In each case there is a single task or enterprise carried on by several persons, and it is not difficult to see how the master, the *superior*, he who puts the enterprise in motion, was held responsible to persons outside for any injury resulting from the enterprise, by whomsoever occasioned; an analogy which may explain, if it does not justify, the law.

"5. But there is no record that the master or *superior* was liable for injury occasioned to any person engaged in the enterprise. The slave or child under the Roman law had no choice and no rights; and the English courts have always considered that a servant, who is free to choose whether he will or will not take part in the enterprise or task, by the contract of service itself undertakes to run all risks necessarily incident to the employment, the principal and most obvious of which is the injury which the negligence of others engaged in the same employment may occasion.

"6. For upwards of one hundred and fifty years after a master was held liable for injuries occasioned to strangers, no attempt to extend the liability to cases of injury occasioned by fellow-workmen is recorded; and when at last such an attempt was made in the well-known case of *Priestly v. Fowler*, which was decided in 1837, the court at once refused to extend the principle to cases to which it was not applicable, and that on the broad ground that a man is free to take the employment or not, but that if he chooses to do so he takes it with all attendant risks. The decision in the case of *Priestly v. Fowler*, if not the whole of the reasoning on which it is based, has been generally approved and followed by the courts in this country and in the United States.

"7. This judgment has, however, been the subject of much adverse criticism. It is contended that, whether the law-throwing on the master the responsibility for injuries occasioned to strangers be just or unjust, the exception in regard to injuries occasioned by fellow-workmen is simply an exception to an established rule; and it is regarded as an exception specially directed against and injurious to those who from their position are most in want of the protection of the rule. But your committee consider that this view is not well founded; and they have the high authority of the late Lord Chief Baron Pollock for saying that the court, in *Priestly v. Fowler*, laid down no new law. He says, 'I believe it was the law; I thoroughly understood it to be so before attention was called to it.' The true principle of law is, that no man is responsible, except for his own acts and defaults; and the rule relied upon is itself not a rule, but an exception, which the courts have explained and confined within proper limits.

"8. It is, however, to be observed that a series of decisions by the Scotch judges denied that the decisions of the English courts were consonant with the law of Scotland. In this condition of the authorities, an appeal was presented to the House of Lords in 1856, in the course of which the Law Lords affirmed that the law was identical for England and Scotland.

"9. There can be no doubt that the effect of abolishing the defence of 'common employment' (as has been actually proposed in a bill submitted to the House) would effect a serious disturbance in the industrial arrangements of the country. Sooner or later, the position of master and workman would find its level by a re-adjustment of the rate of wages; but in the meantime great alarm would be occasioned, and the investment of capital in industrial undertakings would be discouraged. Your committee cannot express their opinion on the question of the public policy involved in the existing law, better than by adopting the language of the distinguished American judge, who decided the case of *Farwell v. The Boston & Worcester Railway Corporation*: 'when several persons are employed in the conduct of one common enterprise or undertaking, and the safety of each depends much upon the care and skill with which each other shall perform his appropriate duty, each is an observer of the conduct of the other, can give notice of any misconduct, incapacity or neglect of duty, and leave the service if the common employer will not take such precautions, and employ such

agents as the safety of the whole party may require. By these means, the safety of each will be much more effectually secured than could be done by a resort to the common employer for an indemnity, in the case of loss of life by the negligence of each other.'

"10. Your committee, therefore, are of opinion that no case is made out for any alteration in the law relating to the liability of employers to their workmen for injury in the course of their employment, except in the matters to which they now proceed to refer.

"11. A master is not altogether free from liability to his servant for injuries resulting in the course of his employment. If it can be shown that the master has omitted to provide the servant with proper materials and resources for the work (such as engines or scaffolding), or has been negligent in the choice of the persons to whom he entrusts the supply of such materials, or the arrangement of such work, or has been guilty of want of care in the selection of proper servants, the master is liable, even to his own servant, for any injury resulting from such omission or negligence. But, to establish this liability, it must be brought home to the master personally. The development of modern industry has created large numbers of employing bodies, such as corporations and public companies, to whom it is not possible to bring home such personal default; and there are other cases in which masters leave the whole conduct of their business to agents and managers, themselves taking no personal part whatever, either in the supply of materials or in the choice of subordinate servants

"12. Your committee are of opinion that in cases such as these, that is, where the actual employers cannot personally discharge the duties of masters, or where they deliberately abdicate their functions, and delegate them to agents, the acts or defaults of the agents who thus discharge the duties and fulfil the functions of masters, should be considered as the personal acts or defaults of the principals and employers and should impose the same liability on such principals and employers as they would have been subject to had they been acting personally in the conduct of their business, notwithstanding that such agents are technically in the employment of the principals. The fact of such a delegation of authority would have to be established in each case, but this would not be a matter of difficulty.

"13. Your committee are further of opinion, that the doctrine of common employment has been carried too far, when workmen employed by a contractor, and workmen employed by a person or company who has employed such contractor, are considered as being in the same common employment. Such cases do not come within the limits of the policy on which the law has been justified in paragraph 9 of this report."

EMPLOYERS' LIABILITY ACT.

(43 and 44 Vic., ch. 42.)

In accordance with the recommendations of the committee, a bill was prepared, which, as amended in the House of Lords, on motion of Lord Beaconsfield, provides, in sections

1 and 2, that common employment, so called, shall not be a defence where a workman receives personal injury :—

1. By reason of any defect in the ways, works, machinery or plant connected with or used in the business of the employer, which defect existed in consequence of the negligence of the employer, or of an employee by him entrusted with the duty of guarding against any defect.

2. By reason of the negligence of any person entrusted with superintendence.

3. By reason of the negligence of any superior workman whose orders the person injured was bound to obey.

4. By reason of obeying proper rules or by-laws, or any rule or by-law duly approved by certain public officers therein specified.

5. By reason of the negligence, on a railway, of any person at the time in control of the train.

Unless the person injured knew, or failed, when necessary, to give notice of the defect which caused the injury.

Section 3 limits the sum recoverable as compensation.

Section 4 limits the time for recovery of compensation.

Section 5 makes any penalty received by any other act part payment.

Section 6 relates to the trial of actions.

Section 7 provides for the service of a notice of any injury received.

Sections 8, 9, and 10, respectively, defines terms used in the act, tell when it shall go into operation, by what title it shall be called, and how long it shall continue in force.

FARWELL v. BOSTON & WORCESTER RAILROAD CONSIDERED.

This case was decided in 1842, and was a case of first impression. It contains substantially all the arguments which in forty succeeding years have been adduced by the courts in favor of the rule therein adopted. The cause of action was the crushing of an engineer's right hand, through the negligence of a brakeman, a fellow-servant in the defendant's employ, in throwing the engineer's train from the track. The opinion is by Chief Justice Shaw, and follows, with elaborations, the line of defence laid down in Judge Fletcher's brief for the defendant. Charles G. Loring was counsel for the plaintiff. Judge Shaw, in his opinion, says that the case must rest either, first, upon the principle known as *respondet superior*, which makes every master liable, in tort, to third persons, for the negligence of a servant, so long as the servant acts within the ordinary scope of his authority (1 Bl. Com. 431; and 3 McQueen, H. L. 300-306); or, second, the master must be liable in contract, because public

policy requires the law to imply, in the contract of service, a contract of indemnity against the negligence of a fellow-servant. The principle of *respondeat superior*, requiring reparation, rests upon the great principle that every member of society is in duty bound to so manage his affairs as to do no injury to another. It matters not whether he acts by his own hand or by that of his duly authorized agent or servant; because whatever he does by the hand of another, he does by his own hand. (*Qui facit per alium facit per se.*) This ground, which is, as has been seen, the one upon which the advocates of a change of the law rest in part their arguments, was unfortunately abandoned by Mr. Loring, the plaintiff's counsel, and very little considered by the court.

The second ground was said to rest upon the further principle that where, in the contract of service, there is no express contract determining whether the master is liable, the court has a right to make for the parties what is called an implied contract. Public policy, it is said, allows and requires the courts to imply a promise, "arising from the duty of the master to be responsible to each person employed by him, in the conduct of every branch of business where two or more persons are employed, to pay for all damage occasioned by the negligence of every other person employed in the same service." His duty, if it exists, would only be analogous to the duty resting upon every common carrier, to make reparation for any injury to merchandise entrusted to him which was not caused by the act of God, or the act of a public enemy; as it would also be analogous to the obligation resting upon an innkeeper to make reparation for any injury occurring to the baggage of his guests.

Having carefully laid down the two legal propositions upon which either an action of tort or an action of contract can be maintained, Judge Shaw proceeded to argue that the servant cannot recover in tort, because the relations existing between him and his master are "regulated by the express or implied contract between them; and he cannot recover in contract, because, although there is an express or implied contract, it is not a contract of indemnity." There seems to be a fallacy in this reasoning. It is based upon a wrong premise of fact, that there are no causes of action

with remedies, both in tort and contract. If stated in the syllogistic form, it would read thus : —

Major premise, — There is no cause of action for which there is a remedy both in tort and contract.

Minor premise, — If the servant has any remedy, it is in contract.

Conclusion, — But there is no remedy in contract ; therefore, the servant has no remedy. The major premise is false in fact, because there are causes of action with a double remedy both in tort and contract. For instance, a person may become liable by the same act (which is the cause of action) in tort for an assault, and in contract for a breach of a bond given the plaintiff to keep the peace. Again, a common carrier may be liable in tort for the conversion of merchandise entrusted to him for safe delivery, and in contract for breach of a special promise to deliver it to the person to whom it is directed. The person injured may be obliged to elect whether he will proceed in tort or in contract, but he nevertheless has both remedies. The dilemma, then, contained in the major premise of Judge Shaw, is what in logic is called a false dilemma. A servant who is injured by the negligence of a fellow-servant has likewise, say the advocates of a change of the law, two remedies, — one in tort, under the principle called *respondet superior*, and one in contract, under an implied contract of indemnity ; though, before trying his action, he may be obliged to elect which remedy he will pursue.

If, however, he has only one of these remedies, it matters not for the purposes of this discussion whether it is a remedy in tort, as trespass on the case for consequential damage, under the principle of *respondet superior*, or a remedy in contract, by virtue of an implied contract.

REASONS IN SUPPORT OF THE LAW AS IT EXISTS CONSIDERED.

A careful consideration of this opinion, of the opinion of Lord Abinger in *Priestly v. Fowler*,* of the opinions of the South Carolina judges in *Murray v. S. C. Railroad*,† of the judgments of the House of Lords in the cases of the Bartons-

* 3 M. & W. 1.

† 1 McMallon, 385.

hill Coal Co. *v.* Reid and *v.* McGuire,* of the opinion of Judge Strong in *Sherman v. The Syracuse & Rochester R. R.*† (the first case in New York which does any more than quote the earlier authority of other courts), and various other leading cases in the various States, has deduced the following reasons in support of the law as therein laid down, which, in a spirit of candor and deference, will be carefully considered *seriatim*.

I. — *Is the Servant the Master's Agent?*

The master, it is said, is not responsible, because the servant who caused the injury is not his agent.

That he is his agent for certain purposes there can be no doubt. He is his agent for certain purposes by virtue of his being a servant. Whether he is an agent for the purpose of doing the particular act which causes the injury, is the real question, which must carefully be kept in mind to avoid, what is the cause of so many disagreements and discussions, confusion in the use of terms. This is a question to be decided by an interpretation of the words which were used when creating the agency, aided by a full knowledge of the authority usually conveyed by terms of general agency. For instance, whether A has authorized B to do a certain act, is a question of fact to be decided by interpreting the words A used. If, for example, A was the owner of a cotton-mill, and should tell the engineer to turn the steam on five minutes before the usual time, and while the weavers were cleaning their looms; and if one of them through this act of negligence should be injured, there would be no doubt that the engineer did a certain act; no doubt that, for the purpose of doing this act, he stood in the owner's place, acting within the scope of authority conferred; no doubt that, in the usual and legal meaning of the words, he was his agent.

But suppose, further, that the owner denies that he told the engineer to turn on the steam. How can the question of agency be determined? It is a question of fact, is it not, and not a question of law? And, as a question of fact, and not of law, it must be determined upon a full knowledge of

* 3 McQueen, 266 and 300.

† 17 N. Y. 153.

all the circumstances, the *res gestæ*, as presented by the testimony of whoever knows about the circumstances.

And suppose, further, that there were no words used, but that the steam was turned on, as is usually the case, by virtue of a general authority as engineer. It remains still a question of fact, which must be determined with the aid of any evidence which can be given as to the authority which this engineer had, or which engineers usually have. It is still, however, a question of fact. If the engineer did an act which caused an injury, is it for the court to say, as matter of law, that he was not, for the purpose of doing this act, his employer's agent? Had the steam been turned on in the exercise of a general authority, and no injury had resulted, the agency would not have been disputed. Now that an injury has resulted, can the court say, as matter of law, that because the act happened to work an injury, no agency existed? It is the same act, whether it did or did not cause an injury.

The circumstances of no two cases are alike, and each question of agency must be decided upon its own particular circumstances. Are they not questions of fact which, as was done by the Scotch judges in *Wilson v. Merry*, should be left to a jury? Should the judges attempt to say beforehand that in every case where a servant injures a fellow-servant he is not his master's agent? Are they not passing upon a fact which should be left to a jury? Are they not stepping beyond the boundaries of their legitimate province? Is not law so made what is called judge-made law?

II.—*Is the Rule of Non-Liability the Better Policy?*

“Considerations of public policy and general convenience, which are the basis upon which implied contracts rest, requires that employees should take their own risk. For example, railway travel would be less safe if the employee knew that in case of injury he could recover damages of his employer. To compel him to take his own risk is strongly calculated to secure his fidelity and prudence.”

This is an argument which is of course based upon experience. It means that, from a knowledge of human nature, there is danger that employees might injure themselves for

the express purpose of recovering damages. This argument (first used by Lord Abinger in *Priestly v. Fowler*), has been repeated often in defence of the existing rule. It is, however, a question which judges are no better capable of deciding than other equally intelligent and experienced men, and one of those questions of fact which the policy of the law has usually referred to juries.

While, no doubt, there are those who would be purposely careless, — for all men are not always honest, — are not such men exceptional? Most people are honest. Most people are prudent. Most people prefer sound limbs and bones; prefer life, health or happiness to death, suffering or misery. Most people are averse to pain. Is not this as true of railroad employees as of the generality of people? Rules of law are made to meet the majority, not the minority, of cases. Is it just or wise to establish so important a rule through fear that a few persons should be dishonest to their employers, and cruel to themselves? Is it not compelling too many to suffer for the probable sins of a few? Is it not depriving too many of a benefit, lest a few should acquire more than they deserve? Is it not refusing to do justice to the many, lest the few should abuse a right? Is it not making too low an estimate of human nature, to think that employees would injure themselves, and perhaps others, in order to get money damages? Should the lives and happiness of all railroad employees, and perhaps the happiness of their wives and children, be left without the damage-right allowed to passengers, lest a few dishonest officers should abuse the right by exposing themselves to the risks and uncertainties of an injury? It should be remembered, as has been elsewhere suggested, that this argument, based upon public policy, is one which comes more properly within the province of legislators, who, in a form of government like ours, are the rightful determiners of what laws the public policy of the country requires.

III. — *Does the Employee Take the Risks of the Employment?*

The employee, it is said, takes the risks of the employment by entering into it with his eyes open.

That in a legal point of view, so long as the law remains as at present, he takes the risks of the employment, there is no doubt. If he is injured, under the law, as it exists, he can recover no damages; and every man, according to a well-known legal maxim, is presumed to know the law. But the argument rests, not upon this presumption of law, nor upon the fact that a servant, if injured, cannot, under the law, recover damages of his employer. It must rest, in order to have any force, upon another presumption, — a presumption of fact, — that the employee, at the time of entering into the contract of service, actually thinks of the question of damages, and actually decides to take his own risk. In order that this argument may have full force, it is necessary to presume that the employee at such a time actually stops to think of the possibility of his being injured; stops to think of the question of liability for damages in case of injury; that he realizes, with full knowledge of the law, that his employer is not liable, but that he must take upon himself the risk of recovering damages. Unless the employment is a dangerous one, it is improbable that, when engaging to work, the idea of personal injury ever enters his mind. When he enters into a dangerous employment, it is improbable that he would think of the question, who is liable to him for damages in case of injury. Though all men know that they must die, few men, in a healthy state of mind, ever quite realize that the shaft of death is likely to strike them at any moment. We see men dying around us, — friends and neighbors; see others sick or meeting with accidents; but never quite expect that a similar fate will overtake us. We read that an acquaintance has been killed by a railroad accident; has received an injury from a fall of snow while passing a building; has been drowned by the capsizing of a boat; has been accidentally shot: but we go on as before, riding in cars, sailing in boats, or carrying fire-arms. Is not the same true of the employee? Does he stop to think that he may be injured? that he may be in need of compensation in damages? that he cannot recover them of his employer? How many passengers, when they buy their railway tickets, stop to think that they do *not* take their own risks? Why should these same persons, when

entering into a contract of employment, stop to think that they *do* take their own risks? The argument that the employee takes the risk of the employment with his eyes open seems to be open to exception.

IV. — *Is the Price of Labor Proportionate to the Risk of the Employment? **

It is further said in these judicial opinions, as a corollary of the preceding argument, that the employee is paid for taking the risk by proportionately higher wages. This argument, like all of the preceding, is based upon a presumption of fact, derived from experience.

What regulates the price of labor? Political economy, which deals so much with general theories, tells us that the price of labor generally depends upon the ratio of the demand to the supply, which itself is regulated by the proportion between the number of laborers and the circulating capital employed directly in the purchase of labor. There are various other causes which assist in determining the price of labor, such as the state of trade, the price of food, rent, the price of the commodities used by laborers, the increase or decrease of population; but, more than all, the prevailing standard of living.

There are various causes of the increase or decrease of the price of labor inherent in the nature of the employment; such as the cleanliness or dignity of the employment, the ease or difficulty with which it is learned, constancy or inconstancy of occupation, the degree of confidence required, the responsibility reposed, the certainty or uncertainty of success. There is also no doubt that wages ought to depend in part upon the security or danger attending an employment. But whether they do or not cannot be known except theoretically, as facts which seem reasonable are taken for granted — upon the theory that what ought to be is — without an accurate knowledge of a vast mass of facts, and a calculation and comparison of figures. This does not appear to have been done by the judges, nor by any one, with much nicety and accuracy. The committees of the English Parliament made some examination of the question, by asking the opinion of various employers of

* See p. 85, *post*.

labor and men of large experience in business affairs. The investigation elicited the fact that the risk of the employment had very little effect upon wages. A Somersetshire collier, working in an employment more than ordinarily dangerous, receives 3s. 6d. a day; while a joiner, whose occupation is attended with little if any danger, receives 5s. a day. The problem can be determined in a general way, by ascertaining whether railroad employees are generally better paid than workmen in less dangerous occupations, than farmers or laborers, for instance, in proportion to their services. It can be determined with a little more nicety by ascertaining whether brakemen and shunters, who are engaged in the most dangerous employment, that of coupling cars, are really paid more or less than other employees of like capacity.

On the English railways the shunter receives from 20 shillings to 30 shillings per week, — less pay than any other employee, and about half as much as an engineer. A “green” shunter — one who has just begun to work — receives from 20 shillings to 22 shillings; while an experienced shunter, who is more useful to the company and less careless of himself, receives on an average from 25 shillings to 30 shillings per week. Both receive less than a porter, whose labor is less dangerous.

V. — *Grades of Common Employment.*

As soon as the term common employment came into use, it was evident that there would be difficulty in defining its limitations. Should common employment, as a defence to actions for damages, include all employees who work for a common employer, or only those who work side by side in the same kind of occupation? Should it include, for instance, all the men who work in a colliery, or should it distinguish between the half dozen or more different occupations, — the men who go first into the mine, to test for coal gas, and see if the mine is fit to work in; the miners, who work with pick and shovel; the men at the mouth of the pit, who attend to the hoisting machinery; the foremen of the various gangs of workmen; the managing engineer and his special assistants, who give the general directions as to the sinking and work-

ing of the shaft. In a crude way, Lord Abinger, in the first case decided, cited by way of analogy various instances where, as he thought, the law would work a hardship, most of which were taken from household and menial service, where no sensible man claims that distinctions should be made. But now that the gigantic and manifold operations of business have outgrown the crude simplicity of those primitive days of the development of manufactures, railroads and the mechanic arts, the importance of drawing distinctions is more apparent and necessary.

The Scotch judges, with singular foresight and discretion, saw that the rule could not with justice be made to apply to every person who worked for one employer, and was paid, directly or indirectly, from the same purse; saw the injustice of making a workman suffer in consequence of the negligence of one whom he did not control, knew nothing about, and perhaps had never seen; and attempted to solve the problem of common employment, first, by making an employer liable for the acts of an employee engaged in an occupation entirely dissimilar to that of the person injured; afterwards, by allowing all the circumstances of the employment to be submitted to a jury, who should decide whether, upon consideration of all the facts, the relation between the fellow-employees was so distinct that one ought not to be compelled to suffer for the negligence of the other.

The English and American courts had, however, gone so far in the direction of making common employment include every man who worked for a common employer, that when in 1868 the case of *Wilson v. Merry*,* on appeal from the Scotch courts, came before the House of Lords, the distinctions which had been drawn in Scotland were overruled.

And when again the same question came before the courts of New York, Judge Strong, in the case of *Sherman v. The Syracuse & Rochester Railroad*,† declined to make any distinction, principally for the reason that it would be difficult to draw the line, and say when the occupations were so similar that the employer should not be liable. This, were it the only reason given, would be equivalent to a refusal to do justice in a court of justice, because of the difficulty of making an attempt.

* L. R., 1 Scotch Appeals, 326.

† 17 N. Y. 153-156.

The hardship of this rule will be seen when the severity of its application is realized ; when it is remembered that it includes a carpenter building a shed, and the engineer whose negligence kills him ; a weaver, and the engineer who starts the factory machinery before the usual hour ; a hod-carrier, and a slater who, at work for a sub-contractor, drops a slate upon the former's head ; a factory girl, and an architect who, without sufficient professional skill, designs a factory building that falls in ; a brakeman, and a switchman who sleeps at his post of duty ; the baggage-master of one train, and the conductor of another, who disregards the company's time-table ; a laborer riding home from his day's work, and the superintendent who carelessly causes a collision ; all the employees on a train, and the mechanical engineer in the company's employ, who makes the plans of a bridge which gives way, as in the recent horrible disaster at Ashtabula.

VI. — *Is there Need of Further Legislation to Protect Labor?*

It is further urged by the courts, in support of the rule laid down, that the employee is as free to choose his employment as the employer to select his workman ; that, if he wishes, he can avoid a dangerous employment, or point out defects in machinery, or incompetency in fellow-workmen, as well as his employer can. It should not, however, be forgotten that the employee has no supervision or direction over the work ; that he is usually hired and paid by the day or month ; that employers, as a class, are chary of receiving from their workmen suggestions as to how the work should be conducted, or complaints against fellow-workmen ; that workmen usually do not occupy the same position of independence as their employers ; and if, in the hurry of business, they are too much afraid of taking risks, or too much inclined to make complaints, they may receive, instead of encouragement, an unceremonious dismissal. They are at best but sailors, so to speak, on the ship, whose duty it is to man the yards, furl the sails, scour the decks, as the captain orders ; who, it is said, usually prefers to keep the reckoning, take the longitude, and direct the ship's course himself. Business is not conducted by stump speeches and

electioneering, as caucuses are, nor controlled by ballots and majorities. The employment is usually solicited by the laborer. He, too often, has little money in his purse, and often a large and hungry family to maintain. There are usually many more laborers than hirers of labor. If the laborer is too scrupulous as to the qualifications of his employer, some less particular man may get the place. Employers seldom stand on the corners of the streets with certificates of fitness in their hands. Poverty is a blind critic, as well as hard taskmaster. There is no risk it will shrink from incurring, no burden it will not assume. Poverty is the arch-enemy of safety. While Capital, with leisurely care, can select the channels through which it will run, the industries it will set in motion, the wheels it will turn, and the railroads it will operate, Poverty must labor when and wherever it can, often with one eye blind to dangers, and one shoulder bent beneath an unequal load.

Although courts cannot interpose to lighten this burden, is not this a fitting opportunity for the legislature to interfere for the protection of labor? Is it not another occasion when the legislature ought to interpose, and lighten the heavier scale of justice by transferring the risk of personal injury from the scale of labor to that of capital? Would not this tend to raise the wages of persons engaged in dangerous employments, by compelling employers, upon whom would rest a heavier responsibility, to be more careful in the selection and discharge of their workmen? Would it not, in railway travel especially, make the general public more secure by ensuring the employment of more trusty, because better paid, workmen?

Should it be said that the employee can now oblige the employer to use due care in the selection of his workmen, by a suit for damages in case of neglect, the answer springs at once to the lips that this is at best a barren right, because in enforcing it it is practically almost impossible to prove that due care has not been exercised. This, like the other right to compel the employer to use due care in the selection of his materials, machinery and plant, is, both to the employees and the general public, because of the difficulty of proving his neglect to provide them, practically a worthless security.

VII. — *Should a Contract of Liability be Implied ?*

The controlling reason given by the courts in support of the rule laid down, is that the law does not imply a contract of liability.

This is a strictly legal reason, based, however, like each of the reasons previously considered, upon a presumption of fact. What is an implied contract? It is a contract which, in the absence of an express contract between the parties, is implied by the courts. It is, in other words, a contract which, where the parties have failed to express their meaning, the court puts into words for them. It is, however, always based upon a presumption of fact as to what their meaning was.

By virtue of what right does a court assume to put the contract into words? By virtue of considerations of public policy. By virtue of the assumed, but now undisputed right of the courts to say that public policy requires them to express in words what the parties themselves actually meant, or what they ought to have meant. For example, if the grocer sends to a customer's house, upon an order, a barrel of flour, considerations of public policy allow the courts to imply that the customer meant, or ought to have meant, when he gave the order, to pay a reasonable price for the flour. The words "public policy," in order to have any meaning, must mean the public policy of the State or country to which the court rendering the decree belongs. Of this right, Judge Shaw, in the opinion so often referred to, says: "In considering the rights and obligations arising out of particular relations, it is competent for courts of justice to regard considerations of policy and general convenience, and to draw from them such rules as will, in their practical application, best promote the safety and security of all parties concerned. This is, in truth, the basis on which implied promises are raised, being duties legally inferred from a consideration of what is best adapted to promote the benefit of all persons concerned, under given circumstances." He illustrates this principle by the well-known instance of common carriers of merchandise, for whom the courts make an implied contract of liability, amounting to a warranty that merchandise

entrusted to them shall be safely delivered to the persons for whom it is intended; by the case of inn-keepers, for whom the courts imply a contract of insurance against fire, and warranty that the baggage of their guests shall be kept from injury; by the case of common carriers of passengers, for whom the courts imply a contract to render compensation in damages to those passengers who may be injured through their negligence or the negligence of their agents.

As soon as this principle — that courts, in the absence of an express contract, have a right to imply for the parties a contract in harmony with the public policy and general convenience of the country — is taken into consideration, it at once occurs to any one that if, in the judgment of Lord Abinger, who in 1837 decided the first case upon this subject, the public policy of England had required the adoption of a different rule from the one laid down, the first precedent would have been different, and employers would have been held liable for injuries caused to their servants by the neglect of fellow-servants. It is likewise apparent, if the first case had been different, that when, shortly afterwards, the courts of South Carolina and the courts of Massachusetts were called upon to apply the rule to the liability of railroad corporations, they would have followed this precedent, had they not thought that the public policy of their respective States required the opposite rule. It is likewise apparent that when these latter judges, during the infant days of railroad and manufacturing enterprises, in the exercise of their discretion, adopted so severe a policy of protection, they might have mistaken the true policy of the country; apparent that they and their followers virtually became political economists, and laid down upon this subject the public policy of two great countries; and apparent that this rule is not in harmony with the usual policy which protects American capital against foreign competition, because it protects it at the expense of our own laborers. It is equally clear that they became makers of law rather than judicial interpreters. And not only is it clear that their opinions, which are judge-made law, may have been founded upon a wrong theory as to what was the true policy of the State or country, but it is also plain that what was thought by these judicial political

economists to be the true theory, may, in the growth of years and knowledge, be judged of differently by legislatures of the present time, who certainly have as well acknowledged a right to legislate concerning the continuance or discontinuance of the policy of protecting great monopolies at the expense of their employees; and the English Parliament has seen fit to change the policy of England by adopting a new theory.

HOW LARGE EMPLOYERS ESCAPE LIABILITY.

Every man is liable for his own torts and breaches of contract. This is elemental law. Every man is liable for injury inflicted by personal negligence. If, while driving through the streets, he carelessly runs over some one, he is liable. If, while conducting a small manufacturing business, he injures one of his workmen by his personal negligence, he is also liable. If, while running a small cotton factory, which is under his own management and supervision, he carelessly, with his own hand, starts the engine before some workman, while cleaning the machinery in obedience to his orders, has finished, he is liable for the results of his personal negligence.

But if, as business increases and more workmen are employed, he hires a superintendent to direct the work and oversee these men, he thereby escapes liability for personal injuries. The superintendent, it may be, works strictly under his orders, doing precisely what he is told to do. The superintendent is his agent, duly authorized and commissioned. He works strictly within the scope of his acknowledged authority; he never disobeys an order; and all the details of the business are done strictly in harmony with the general authority conferred. He is, it may be, in every legal sense, the employer's other self. His hand is his employer's hand, his eye, the eye of his employer. His hand, his eye, his every act, are guided by a mind so much in harmony with the desires and interests of his employer, that it may almost be called the employer's mind.

We may go still further in our supposition: the superintendent may be even more expert and competent than his employer. He may, perhaps, have had a better training,

a larger experience; he may have learned his trade in a better school, and better understand the secrets and difficulties of the business. If a mechanic, he may be a better mechanic. If a machinist, he may be more adept. If a manufacturer, he may be more skilful. If a railroad superintendent, he may better understand the construction of locomotives, the control and management of trains. If a mining engineer or superintendent, he may know better than his employer how shafts are sunk, and coal or ore is mined.

All this, however, makes no difference. The eye of the law is blind to all these advantages. The employer, by the very act of hiring an agent or superintendent, has relieved himself from such liability for personal injuries to his employees. He is still liable, as before, to third persons, to all the outside world. If a stranger, a passer-by, a visitor, a passenger, is injured, he must make reparation. But the law, by a just or unjust exception, gives him liberty to escape damages from injuries to his employees, so long as they are caused by the negligent hand of a duly authorized agent.

HOW CORPORATIONS ESCAPE LIABILITY.

The same rule which excepts large employers of laborers, excepts also corporations. With them it works with added force. A corporation is an incorporeal being, a creature of the law. It is an impersonality. It has neither birth nor parentage. It knows no father but the State. The State is only its foster-father. It does nothing of itself; does all its acts by the hands of agents. Like the fabled daughter of Jove, it is invisible, yet by its influence controls the acts and guides the hands perhaps of hundreds. But whatever is done for it by the hand of an agent, is, in the eye of the law, done by its own hand. It is responsible for the acts of its agents, as corporeal beings are. The maxim, *Qui facit per alium facit per se*, — “What you do by the hand of another you do by your own hand,” — applies to corporations as well as to persons. To this general rule there is, however, one exception. It is not liable for the acts of its agent when those acts cause personal injury to another

agent. It is not liable for these acts, because both agents are fellow-employees of the corporation.

The hardship of this exception becomes more manifest when we remember that persons—almost any and every person, three or seven, according as the law requires—engaged in business may become a corporation by applying to the Secretary of State, and conforming to the simple requirements of the corporation act. By this process of incorporation persons are not changed or regenerated, but their legal liability becomes changed. As persons, they were liable for their personal negligence; as a corporation, they are not persons, and therefore not liable for their own negligence. Neither are they, as we have seen, liable for the negligence of their agents, when this negligence causes personal injury to fellow-agents. For any act of an employee which causes personal injury to another employee, is an act done by a person who is a fellow-employee of the person receiving the injury. Corporations thus escape all such liabilities.* When it is realized how much of the business of the world is done by corporations, how many manufacturing and railroad corporations there are, how extensive are their operations, and how many thousands of workmen they employ, the importance of this exemption from liability will be better appreciated.

ACCIDENTS UPON RAILROADS.

“In the providence of God there are no accidents,” said one of Massachusetts’ most honored sons, in commencing his eulogy on Abraham Lincoln. This truth, so tersely expressed, applies with equal force to persons killed upon our railroads. No man dies without a cause, though the cause and the causer may remain alike unknown. Every death upon a railroad, like every death by violence, is the result of somebody’s negligence or wilfulness. How many persons in this Commonwealth are annually killed or injured through some one’s negligence, can never be known. It is probable that from ninety-five to ninety-eight per cent. of them are either the proximate or remote cause of their own injuries. They are the victims of either their sole or their

* See *Howells v. Landore*, L. R. 10 Q. B. 62; and *Wilson v. Merry*, before cited.

contributory negligence; and, in either event, the law excludes them from recovering damages. A good proof of this estimate is furnished by the records of the courts as compared with the number of accidents. In how few of the hundreds of instances where persons are killed or injured are damages recovered!

The railroad is the most fruitful field of violent deaths. According to the Railroad Commissioners' Report for 1882, there were 9,651 train accidents in the United States from 1873 to 1881, inclusive; 1,117 of them causing one or more deaths; 1,676 causing one or more injuries. There were 2,372 persons killed, and 9,387 persons injured. During the year ending September 30, 1881, there were in the United States 1,481 train accidents, as reported in "The Railroad Gazette," by which 438 persons were killed, and 1,644 persons injured. By the Report of the English Board of Trade, the number of train accidents and collisions on the railroads of Great Britain, with their results, is as follows*: —

Total number killed,	1,135
Total number injured,	3,959
Passengers killed,	142
Passengers injured,	1,614
Persons killed on railroad premises, not resulting from the movement of trains,	45
Persons injured on railroad premises, not resulting from the movement of trains,	2,733
Employees killed (including employees of contractors),	546
Employees injured (including employees of contractors),	2,080

Of 5,084 persons killed or injured in England by the movement of trains, in nine years, 2,620 were employees, which is over fifty per cent.

During the year ending September 30, 1881, according to Table C of the Appendix to said report†, there were, in this Commonwealth: —

Total number killed,	184
Total number injured,	231
Passengers killed or injured,	42
Employees killed or injured,	200
Trespassers killed or injured,	126

* See Mass. Railroad Commissioners' Report, 1882, pp. 21, 22.

† *Ibid*, p. 62.

At highway crossings and stations, killed or injured.	47
Passengers killed or injured by causes beyond their own control,	11
Passengers killed or injured through their own carelessness,	31
Employees killed or injured, train men,	167
Other employees killed or injured,	33
Total employees killed or injured,	200

Of 415 persons killed or injured within the year, 200 (about 50 per cent) were employees, 167 of them being employed in the management of trains.

These facts are furnished to the State by the various railroads themselves. There is no record published of the causes of accidents to employees; but it is probable that from 75 to 95 per cent of the 200 were injured by their own contributory negligence.

It will thus be seen that the effect of a change in existing common law will not be so widespread and injurious to the interests of the railroad corporations of the Commonwealth as has sometimes been apprehended.

It is difficult to tell with accuracy the causes of these injuries to employees. No record of causes is published by the Railroad Commissioners, though it is highly probable that the railroad companies keep, for their own protection in case a suit is brought, a record of each injury, its cause, and the circumstances connected with it. This has been the custom of the English companies. James Grierson, the General Manager of the Great Western Railway, testified in 1877 before a Parliamentary committee, "that every accident, even down to the pinching of a man's thumb, was kept a record of by the Great Western Board for many years before an act was passed requiring the accidents to be reported to the Board of Trade; that is, I mean, accidents to servants." As to the proportion of accidents caused by the contributory negligence of employees, Mr. George Finlay, Traffic Manager of the London and North Western Railway, testified before the same committee as follows: "There were 83 who lost their lives; and, of those 83, 77 men were killed through their own want of caution, and three deaths resulted from the acts of their fellow-servants, and three from other causes beyond their control; so that in 77 cases the men were contributory, by their own negligence, to their

death, which unfortunately occurred, and in six other cases they were not contributory."

When asked if the same proportion of employees were injured through their contributory negligence, he was unable to answer the question accurately from statistics which he had brought with him.

Out of 83 employees killed, it appears that three were killed by the negligence of fellow-employees, which is $3\frac{6}{10}$ per cent, the other $96\frac{4}{10}$ per cent being killed by their own contributory negligence. These data are meagre, but are all that have been obtained.

According to an investigation made by Cornelius Walford, a well-known English statistician, and published in the *Journal of the London Statistical Society*, vol. XLIV., part iii., September, 1881, there are, per annum, in Great Britain and Ireland, 12,000 deaths by accident and violence, — about one in every thousand (p. 512); and as, according to the tables of the accident insurance companies, there are 99 non-fatal accidents to one fatal, he estimates the number of injuries annually occurring in Great Britain and Ireland at 1,200,000. The ratio of fatal to non-fatal accidents in the dangerous employments he estimates as three to one hundred (p. 513), because the severity of the injury increases the number of fatal accidents. Mr. Neison, in his report in the January number, 1880, of the same journal, estimates the ratio of fatal to non-fatal accidents upon railways to be two and one-half per thousand on the passenger traffic lines, and three and one-half per thousand on the lines doing likewise a heavy goods and freight traffic (p. 51); and from the actual experience of the Miners' Permanent Relief Fund he estimates the ratio of miners temporarily disabled at 140 to 190 per thousand, and fatally injured at two and three-tenths to three and six-tenths per thousand; in case of railway employees, 84 per thousand temporarily disabled, and three per thousand fatally injured (p. 502).

ARE COMPLETE RETURNS OF INJURIES MADE TO THE RAILROAD COMMISSIONERS?

It is a matter of State pride that our railroads show as low an average of deaths and injuries as the railroads of other

States and countries. Without intending to impeach the accuracy of the reports of injuries made by the various railroads of the State, it is worthy of remark that the ratio of the number of injuries to the number of deaths is very small.

The number of deaths is, without doubt, correctly reported. Any one desirous of verifying the returns could easily do so by examining the reports of coroners and medical examiners; and perhaps the district attorneys, to whom these officers report each death, keep a record sufficiently complete for this information. Why is it that so many are killed, while comparatively so few are injured? In 1882, for instance, 184 were killed, and only 231 other persons were injured. In 1881, 146 were killed, and only 200 were injured. A railroad train is, to be sure, a fatal instrument of destruction; but why should it be more fatal here than in other States and countries? During the last nine years, 1,266 were killed, and only 1,478 were reported as injured; while during the same years, in the United States, according to the "Railroad Gazette," 2,372 persons were killed, and 9,387 injured, — almost three persons injured for every one killed. It likewise appears by the Railroad Commissioners' Report for 1882, that the total number killed on the railroads of Great Britain in 1880 was 1,135, and the total number injured was 3,959, — more than three persons injured to one who was killed. In 1875 there were, according to the reports of the English Board of Trade, 765 killed, and 3,618 injured, — about five injured to one killed, — on the London and North Western Railway. In 1876, 83 were killed, and 1,898 injured, in the workshops and working the trains, — nearly 23 injured to one killed.

There is, no doubt, a difference of opinion as to what constitutes an injury. One corporation may think that a person is not injured unless he is so severely hurt as to be obliged to lose an arm or a leg, or is unfitted for work for the rest of his life. Another may say that the pinching of a thumb so as to lose the nail is an injury. And if each corporation were to be its own judge as to what injuries to report, it is probable that only severe injuries would be reported.

The accuracy and completeness of reports of the English railways to the Board of Trade were called in question

several years ago, and Mr. Edwin Phillips made an examination and report upon a part of the subject. In this connection it may be well to give a summary of the results which he obtained. He says that a thousand men were killed by the railroads of Great Britain in 1872, while only 590 lost their lives from shipwrecks and other casualties along the coasts. He found that the Lancashire and Yorkshire Company, which had made a return of 39 employees killed, and 73 injured more or less seriously, during the year 1872, had actually killed 54, and injured 1,367, — more than 25 injured to one who was killed. He says further: “The Lancashire and Yorkshire Company have close upon 14,000 men in their employ, but full 4,000 of this number may be deducted for clerks and other officials, who never have to incur danger; so that, taking the number of out-door servants at 10,000, it will be seen that there was one killed to every 185 employed, and one injured to every seven employed. Reckoning the number of railway men on all the lines in the kingdom at 200,000, it may be safely inferred that 1,080 men were killed in 1872, instead of 632, as given in the official returns; and 27,340 injured, instead of 1,395. So that nearly as many men were injured on the particular line referred to, as the Board of Trade returns give for the whole kingdom. It may be added (as I pointed out in my report published in the ‘Times,’ December 20th, 1873) that the result of some investigations conducted by a committee of the Edinburgh Chamber of Commerce strikingly bear out the correctness of my figures. And no person is included among those injured whose injury was not of so serious a nature as to incapacitate the sufferer from following his usual employment for several days.”* Mr. Cornelius Walford, in an article upon “the number of deaths from accidents,” etc., in the September (1881) number of the “London Statistical Journal,” estimates the ratio of fatal to non-fatal accidents in dangerous employments as three to 100, basing his estimate upon facts gathered from the tables of accident insurance companies.

The inference from these facts is, that accidents upon our railroads are more fatal than upon railroads generally

* Fortnightly Review, March, 1874.

throughout the United States and Great Britain ; or else that all injuries so serious as to incapacitate the sufferer for work for several days are not reported.

PROBABLE AMOUNT OF DAMAGES FROM A CHANGE IN THE LAW.

As bearing upon the question of the probable compensation paid annually in damages by railroads, for personal injuries caused to passengers, an elaborate calculation made by Mr. Galt, an English statistician, and published in an earlier number of the "Fortnightly Review," shows that the English railways expend for this cause $2\frac{3}{4}$ d. in every sovereign of their total expenditures, or about one per cent of their total disbursements. The ratio of the number of passengers killed without their contributory negligence, in the United Kingdom, to the number of passenger trips, was : —

In 1877, one in 50,144,876.

In 1876, one in 14,165,455.

In 1874, one in 5,556,284.

Of the 2,500,000 persons employed in the factories and workshops of Great Britain during the year ending with the 31st of October, 1879, 5,333 received fatal or other injuries, or only about one in every 468 persons employed.

In Massachusetts, during the year 1882, the ratio of persons killed, without their contributory negligence, to the number of "passenger trips," including the trips of season-ticket holders, was one in 20,927,034 ; and the ratio of persons injured was one in 667,300. According to the testimony of Mr. Evans, the General Secretary of the Amalgamated Society of Railway Servants of Great Britain, of 4,383 persons killed or injured, no instance came to the knowledge of the society where damages were recovered, although 39 of them were killed, and 514 injured, according to the companies' reports, from causes beyond their own control.

It is thus seen that however many persons are killed or injured, whether passengers or employees, a very small proportion of either could recover damages ; and if one per cent of the total expenditures covers all the money paid out in the form of damages to passengers, a change in the law

as to the liability to employees killed or injured, who are less in number, can work, it would seem, no great hardship.

CAUSES OF INJURIES TO RAILWAY SERVANTS.

The employees, in almost every instance, are the causers of their own injuries. Can nothing be done to make them more careful? Can no additional precautions be taken to make their employment less dangerous? Two hundred were killed or injured in Massachusetts during the last year. The railroad corporations are under a heavy legal responsibility to protect passengers. They are, in a less degree, responsible for the protection of their employees. Do they take sufficient precautions to protect them? If placed under a heavier legal responsibility, would they do more? These are questions which the employees of the British railways have been considering for years. They have addressed petitions and remonstrances to their employers. They have organized trades unions for mutual protection. They have organized mutual insurance companies. They have petitioned Parliament, setting forth their grievances, and asking for additional legal protection. Ten thousand railway servants signed a memorial, which was presented to the Royal Commission when this subject was under consideration. In this memorial they enumerated specifically, as follows, six of the remote causes of accidents to employees: 1st, Excessive hours of labor; 2d, Non-enforcement of certain of the companies' rules, ostensibly made for the protection of the men; 3d, The non-adoption of the most approved appliances conducive to safety in the working of railways; 4th, The want of proper accommodation for the working of freight and traffic; 5th, The employment of inefficient persons for the performance of responsible duties; 6th, The insufficient number of men employed.

In 1876 Frederick W. Evans was the General Secretary of the Amalgamated Society of Railway Servants of Great Britain. He had had a large experience, was familiar with this subject in its breadth as well as in details, and testified before a Parliamentary committee as follows: —

“If you will permit me, I will make a brief statement as to the views which I entertain upon the subject; and as nearly as possible I will

confine my remarks on the subject, in so far as it affects railway servants. Railway servants are, more than any other class, interested in placing on their employers such liabilities as will ensure every precaution being taken for their safety. They are the most interested, because a larger percentage of them are victims of accidents, which, to a very great degree, are of a preventable nature. By the returns which the companies supply to the Board of Trade, it appears that in 1875 alone no less than 4,383 railway servants were killed or injured by accidents on railways. Of this number the companies assert that only 39 were killed, and 514 injured, from causes beyond their own control; while 726 were killed, and 3,104 were injured, from their own misconduct or want of caution. These returns are by the companies. But I look upon the companies as interested parties, and, therefore, not impartial in making such returns. * * * Taking the companies' own figures in the 1875 return as being accurate, there would be even then 553 servants injured by no fault of their own, and to whom, were they not servants, it is probable that the companies would be compelled by law to pay compensation. But, as the law at present (as I understand it) stands, railway servants cannot claim any compensation whatever for the loss they suffer by the acts of others. The companies, at present, are in no way responsible for the safety of their servants. Every act done for a corporate body is the act of a servant; and, whatever the position of that servant to another, any act of his, if injurious to his inferior, the law holds to be the act of a fellow-servant. They are in a common employment. It so happens that, as the law now stands, the life of a railway servant is of less value than the life of a horse; inasmuch as, however gross the mismanagement which produces the death of, or injury to, a servant, there is no responsibility whatever upon the company; whereas, if a horse is injured or killed, it costs the company a certain amount of money in order to replace the animal. It is in consequence of this irresponsibility that companies do not go to any great expense in removing sources of danger to their servants. * * * I hold it to be the duty of the legislature, as the companies cannot act for themselves, but must depute their authority to others, to make the companies responsible for loss sustained by servants through the act of those who wield authority in the companies' names. * * * In shunting [switching] operations, about one in every twenty men engaged are killed or injured in the year. This arises, in a great measure, from a practice termed fly-shunting.

"In the companies' rules this practice is generally forbidden; but, while forbidden in the rules, it is nearly everywhere practised with the consent of the companies' officers; and, with the limited accommodation which the railway companies have for working their goods traffic, I question whether the traffic could be carried on without resort to this practice. Where the rules forbade a practice, and it was carried on with the sanction of the companies' officers, I would hold the companies responsible for all accidents to their servants arising from the practice. There are in the railway service a number of officers of various grades, who each to those servants under them represent the employer, and

exercise, so far as such servants are concerned, the authority which an employer has over those employed. Thus, to the ordinary servant on a railway, the manager, superintendent, station master, inspector and foreman, represent the interests and the authority of the employer, or the company. In any case where the actions of such persons in authority, or the actions of others who carry out their instructions, inflict injury to a servant, I hold that, as the officer stands in the position of employer, the company should be liable for loss occasioned by his neglect, indiscretion, or want of judgment. It also happens that one class of servants are under the direction of another class, and are bound to obey their instructions. Thus, the driver is bound to obey the directions given him by the signalman. Should the driver refuse or neglect to do so, and a fatal accident occurred, he would be deemed guilty of manslaughter; and the companies invariably punish any disobedience by drivers to the directions of signalmen. In this case also, the signalman represents the authority of the employer; and if by his wrong direction a driver, or fireman, or guard were injured, I hold that the company should be liable. It has been asserted that men are paid higher wages in proportion to the risk they run. Nothing could be more inaccurate. In dangerous occupations on railways the risk is greatest when the experience is least, and when the rates of wages are lowest. Thus, the risk to a man just started at from 20s. to 22s. per week as a shunter or brakesman is greater than when, by length of service, he has attained to experience and the maximum wage of 25s. or 30s. respectively. Again, the highest wages are not paid to the class of servants who in the performance of duty run the greatest risk. Thus the shunter, whose duties are by far the most dangerous, receives less than the driver, than the goods guard, than the passenger guard, and sometimes than the signalman. The highest wages are given to those classes whose experience is gained by long service, and whose duties are responsible. It is the interest of the companies to induce these men, by offers of higher wages, to remain in the service. If they became migratory, the work of the lines would be carried on with greater risk, inconvenience, and loss to the proprietors. I am, therefore, of opinion that in the consideration of the liability of railway companies to their servants for injuries, it cannot be maintained that higher wages are paid to cover greater risks. The exemption of the employer from liability for claims to compensation for injuries to one servant, caused by the neglect of another servant, known as the common employment doctrine, bears most unjustly on railway servants. Owing to the different natures of their occupations, there is nothing common in the employment of many railway servants, unless it be that the same shareholders are their employers. There is no real community of employment between a guard and a plate-layer, an engine-driver and a clerk, a joiner and a fireman; yet in these instances the law-courts have ruled to the contrary. And, as between officers and servants, their real relations are those of employer and employed. Thousands of servants never see each other, live miles from each other, are in totally distinct departments, and under different officers. Servants have not the choice of their fellows,

are ignorant of each other's qualifications, and any attempt to interfere with the appointments of the officials would be viewed by them as an insolence. I may state that a little while ago an appointment was made of a driver of some four months' qualification, to the fastest train running on a certain railway. At a meeting of the men I was requested to lay before the chairman this fact; but the chairman has neither had the courtesy to notice my letter, nor has there been any alteration whatever in the state of things. The railway companies generally refuse to recognize any combination of their servants; and therefore the servant would have really no influence in the appointment of other servants by the companies. Nor can the servants judge of the state of the machinery and appliances, other than that immediately under their own control. Any refusal to obey orders may result in an immediate arrest by any officer under the Railway Act of 1842, which provides special protection to the companies against any neglect or wilful disobedience of their servants. These are, to my mind, reasons why the companies should be legally responsible to one servant for the injury done him by another. The whole question presents itself to me in this form: Loss and injury are inflicted on a workman by the carelessness or negligence of a person who has been selected specially by an employer, who acts under the employer's instructions, and who is free from the exercise of any control by the injured workman. The employer is liable for any damage which such a person might, through incompetence or negligence, do to any person not in the employ, or to any property entrusted to the employer; and I am unable to see why the liability should be removed, when the damage is done to an employee through no fault of his own. The servant cannot be expected to undertake a portion of the employer's risk, when he is debarred from sharing in the profits. The servant is a contractor with the company, as is a railway passenger or freighter; and if he faithfully performs his contract, the law should protect him from loss inflicted by other and injudicious or unfortunate contracts which his employer may make with others for the employer's profit and convenience. There can be little doubt that if such was the case, railway companies would more carefully select their servants, and place them under more careful and efficient supervision, and suppress those dangerous methods of doing work now everywhere practised, and which lead to the fearful slaughter of railway servants. It has been urged that if a measure providing compensation for injuries to workmen became law, they would be more careless, and incur unnecessary risk. I am not of this opinion. There are several cogent reasons against such a view. First, for them to do so would in itself invalidate any claim they might make to compensation from their employer. Secondly, if the safety of others was concerned, their conduct would lead, in the railway service, to dismissal from the service, and possibly to imprisonment. Thirdly, it is against human nature to voluntarily incur pain and deformity, and sacrifice family and all natural enjoyments, especially as in this case, when the expected recompense is an uncertainty. Fourthly, such an argument would be equally effective if urged against compensation for injuries to passengers; and, if it has any weight, railway accidents to the public would be more frequent than they are."

In another part of his testimony he says, in answer to a question as to the probable remote causes of the death or injury of the 4,383 railroad employees reported killed, and the 3,104 reported to the Board of Trade as injured in 1875 : “ In my opinion, if the proper causes were returned *in about one-half of those cases*, it would be found that the want of accommodation, and the other causes mentioned in the memorial, would have contributed to the accidents.” (Parliamentary Report of 1876. Ques. 1027.)

CAUSES OF ACCIDENTS UPON RAILROADS IN MASSACHUSETTS.

The general causes of accidents already enumerated are : —

- 1st. Excessive hours of labor.
- 2d. The non-enforcement of certain of the companies' rules, ostensibly made for the protection of the men.
- 3d. The non-adoption of the most approved appliances conducive to safety in the working of railways.
- 4th. Want of proper accommodation for the working of freight and passenger traffic.
- 5th. The employment of inefficient persons for the performance of responsible duties.
- 6th. The insufficient number of men employed.

I. In connection with or in addition to these there are various remote causes of more or less importance. Among them, *First*, is the use of intoxicating liquors. Although the rules of all the corporations proscribe their use, malt liquors, lager beer and ale, are sold at most of the station restaurants.

Second. The favoritism shown in the appointment of train hands. Men who are unfit for the responsibility with which they are entrusted are not infrequently given or retained in positions upon the request of influential directors or stockholders. Their fellow-workmen hesitate to incur the odium of making complaints; and sometimes, especially while there is a pressure of business, incompetent men retain their positions for some time.

Third. The use of the telegraph or block system. Without expressing any opinion as to the comparative merits of this system, it is without doubt sometimes the cause of an

accident. In the hurry of business, while the train is waiting at a station for the order to go on, the conductor sometimes signs, for the engineer, a receipt for the despatch, or the despatch is missent or misunderstood, and in consequence a collision occurs. In a recent case in New York, where a fireman was killed because the conductor had signed the order for the engineer, who, although he had not received it, had started his train, no damages could be recovered, because they were all fellow-servants.

Fourth. The neglect of the statute regulation requiring one man for every two passenger cars. Since the adoption of the air and vacuum brakes, this requirement, designed partly for the protection of passengers while getting on and off the cars, is frequently violated; and, partly because no similar law exists in relation to freight trains, trains of from fifty to eighty cars are sometimes sent out with only four brakemen.

II. Among or in addition to the most approved appliances conducive to safety which have not been adopted, may be mentioned, *First*, the Miller platform and air or vacuum brakes, which, though generally, are not universally used on passenger cars, and have never been in use upon freight cars.

Second. Faults in construction, sharp and reverse curves, sags in the road-bed, which cause trains to break apart or lurch so suddenly as to throw the men off their balance; truss bridges so narrow that men hanging off the steps, on the look-out, are killed; overhead bridges, so low that brakemen are frequently swept off the tops of freight trains. There are some bridges that have killed their half-dozen men.

Third. The insufficient lighting of stations, and the lack of proper platforms and crossings safely arranged and guarded.

Fourth. Insufficient car inspection, which usually extends to the running gear, the wheels and brakes, but seldom includes the body of the cars, especially freight cars, or the ladders and handles. Insufficiently fastened or rotten ladder-rounds are not infrequently the cause of a brakeman's falling between the wheels.

Fifth. The variation in the height of cars, over the tops of which brakemen are obliged to find their way, and generally at night.

Sixth. The lack of a safe railing around the tops of freight cars, a simple and effective contrivance for saving the lives of men, which has been partially adopted by some roads.

Seventh. The awkward, old-fashioned method of shackling cars, which obliges the men to go between them.

III. Among needs of proper accommodation for the working of freight and passenger traffic are, *First*, the need on some of our roads of a double track, or sufficient side tracks. As to this need of one of our railroads, its general manager says: "There has been almost constant blockade of freight-movement lately on the divisions referred to, arising from insufficiency of side tracks to accommodate the vastly increased business. Until within a short time, a half-dozen trains would be found on a division of road with side tracks which would hold but a single train; and, in consequence, the passing and passage of trains was necessarily a slow process." On this road, during the past year especially, a shameful, wicked loss of life has occurred from this cause.

Second. The lack, at local freight stations, of sufficient sidings, freight-houses and platforms, which necessitates the breaking up of the train into parts, when too long to be accommodated, and the shunting-off of these various parts to different tracks in the yard. This process of "fly-shunting" is the most dangerous operation in the working of freight trains.

Third. The sudden adoption of new appliances, before the train men have become sufficiently familiar with their use.

Fourth. The sudden adoption of new methods of business. A collision costing one road sixty thousand dollars, and injuring the fireman severely, was caused, say the Railroad Commissioners, "by a general misunderstanding of a telegraphic order," addressed to the freight conductor for information, and understood as an order to go ahead.

Fifth. The tendency, in using the telegraph, to make the orders so terse as not always to be explicit. Orders

written by an expert operator are for this reason misunderstood by a freight conductor or engineer less expert in this direction.

IV. The employment of inefficient persons for the performance of responsible duties is a not infrequent cause of accident.

First. The management are sometimes deceived by applicants for positions who pretend to be skilled train hands. That economy which discharges employees in dull times, expecting to be able to find competent train men when prosperous times return, is sometimes a mistaken economy.

Second. Because of frequent changes in the sets of train hands, caused by discharges and new appointments, in consequence of which train men do not become familiar with each other and each other's ways and habits of doing business.

Third. Because of the insufficient wages paid on some lines, where, it is said, there are station agents, for instance, who receive only ten dollars per month. Railroads sometimes employ inefficient persons, men who have been injured on their road, in order to avoid the possibility of a claim for damages, retaining them until the claim has been settled or outlawed. Instead of paying, they pension them, and take the risk of accidents.

V. Whenever an insufficient number of men for the proper management of trains is employed, as a natural consequence, they are obliged to work an excessive number of hours. It is when the employee is worn out with overwork that there is the greatest danger lest, by some lapse of ordinary care or attention, an accident may occur. When an insufficient number are employed, there is even greater danger that, in the hurry of making connections, with the extraordinary strain imposed, some slip may occur or something be neglected. An employee on one of the divisions of the London and North Western Railway says, in a letter already published: "I have before me a report from Leeds of one man having worked $131\frac{3}{4}$ hours in a week; also a case of an engine-driver working 106 hours in one week, lately; and 40 or 50 hours in two journeys, with only a few hours' rest, is a common occurrence. A goods guard

told me this morning that he had lately worked $32\frac{1}{2}$ hours without rest, and he received the sum of 12s. 6d., although his employers, in 1872, granted as a concession that ten hours should constitute a day, and afterwards the men should receive overtime at the rate of eight hours per day."

The following are actual cases of overwork and insufficiency of help, which have recently occurred in this State; and, if an accident had occurred, the excuse, if made, that it happened under a pressure of business, would have been no justification for the loss of life.

First. A train due at 6.20 P.M. arrives on time at A——. Passengers and baggage must be discharged, and the train backed four hundred feet, in order to clear the main line for an express passenger train which passes at 6.24, four minutes later. During this time both the inward and outward tracks must also be flagged, which means that one man must be sent forward, and another back, each the distance of fifteen telegraph poles; there are only the conductor and two brakemen to attend to the flagging and the switches.

Second. On one road a section gang, consisting of a foreman and three assistants, is obliged to keep properly graded, and in proper condition, the same length of road to which a section gang of six persons is usually appointed on other roads.

Third. The neglect to provide switchmen has caused many accidents, because the brakemen on the train neglected to leave the switch as it should have been left, and the train which came afterwards was thrown off the track, or on to a side track, where another train was waiting. Had the brakeman even thought of his mistake, after his train had gone on, it would have been almost impossible to rectify it, although a switchman might have done it.

Fourth. An engineer went to work Friday at 5.30 A.M., and remained on duty till Saturday at 12.15 A.M. On the same day at 5.30 A.M., about five hours afterward, he went on duty again, and worked till 7.30 P.M., when his day's work should properly have ended; but he received orders to continue work, and did so for 24 hours longer, until Sunday at 7.30 P.M., being on duty 62 hours, with the exception of five hours and fifteen minutes.

Fifth. Another engineer worked the same number of hours as the preceding one; but, instead of being relieved from duty at 7.30 P.M. Sunday, he continued on duty until 5.30 A.M. Monday, thus making 74 hours of almost continuous work under a heavy responsibility, without rest or intermission, except for five hours and a quarter.

Sixth. The following is a case of overwork by a full set of train men, consisting of conductor, two brakemen, fireman, and engineer. Work begins at 5.30 A.M. Work ends, every second day, at 7.30 P.M., and on every alternate trip at midnight; is continuous all day; every alternate Sunday the same men are on duty from 9 A.M. till 11 P.M., and while on the road are obliged to tend the switches. During the first trip they are on the road 38 hours. During the alternate trips they are on the road $43\frac{1}{2}$ hours; and on every other Sunday they are on duty for 14 hours. During the day they travel about a hundred miles, carrying about a thousand passengers, and making a hundred and fifty station stops. In addition, the engineer must keep an accurate account, and make returns of various matters relating to the amount of coal used, and the working of his locomotive; and the conductor must make out seven different reports on blanks calling for minute details, with duplicates of five of them.

Seventh. Another set of train men work every day from 6 A.M. to 8 P.M., fourteen hours; and from 6 A.M. till 12 P.M., eighteen hours, on alternate days; and likewise work alternate Sundays.

Eighth. A freight train gang left the starting point at 11.10 A.M., and returned at 7.10 the next morning, at the end of twenty hours. At 8 A.M., within an hour of the time of their arrival, they took out another train, returning at 4.30 P.M., at the end of eight hours and a half. Three hours after their arrival, at 7.30 P.M., they began work again, returning at 10.30 A.M. the next day, at the end of fifteen hours, having been on duty $43\frac{1}{2}$ hours, with the exception of fifty minutes' intermission at one time, and three hours at another. "Of course," says one of the brakemen, "I went out with my own train that same night." It was on this road that one of the brakemen, overworked

on a freight train, who had been sent out to flag another train, fell asleep at his post, and was run over and killed by the train he was sent out to flag.

Ninth. The following case is given as an illustration of how train men are prevented, while on their trips, from getting sleep: A train left A — for a trip to Boston, where nearly all the train men live, starting Thursday night on time, and not arriving, in consequence of various delays, allowing no opportunity for sleep, until 5 A.M. Saturday, having been one day and two nights on the road.

Tenth. A train hand, who had worked from 9 A.M. until 11.15 P.M. on Sunday, continuously, $14\frac{1}{2}$ hours, and during the rest of the week $97\frac{1}{2}$ hours, — a daily average of $16\frac{1}{4}$ hours, — declined to work on the subsequent Sunday, because he needed rest, and was discharged. An engineer, who during the week had been on duty the same number of hours, was asked to volunteer to work on this Sunday; and, upon his declining, and upon being told that such accommodating men were to be had, he consented to work.

Eleventh. The plan recently in use on one of our roads, of paying men by the trip, instead of by the day, has been a frequent cause of overwork, by making it possible, in some cases, for train men to do thirty-six days' work in a month.

One reason for the increase of labor imposed upon conductors and engineers is, that they are obliged to make out so many reports with minute specific details.

It is often said that the wages of a railroad employee are higher in proportion to the extra risk which he assumes. As has been already said, the facts do not warrant the assertion. In reply to some recent criticisms upon the low wages paid, the management of one of our railroads say, that while heretofore a conductor has been paid \$2.65 per day, and a brakeman \$1.75 per day, by a plan just adopted, the pay of a conductor has been increased to \$2.90 per day, and that of a brakeman to \$1.90 and \$1.80; which is declared to be a higher rate of wages than that paid by other railroads. Freight-handlers, who work in the freight-house, receive \$1.50 per day; car-knockers, or yard-repairers, who are exposed to no danger from

the running of trains, receive \$1.75 per day; a blacksmith's helper receives \$2.00; a common laborer or a gravel-shoveller gets \$1.50 per day, with regular hours for work, and an hour at noon for dinner. From these figures, and a comparison with the wages ordinarily paid to day-laborers, gardeners, and ordinary mechanics, it will be seen that railway employees are paid, like other men, for the hard work they do, with no extra compensation for the risks incurred. In case one of them is killed, most of the railroads pay the expenses of his burial, unless they are otherwise provided for. In case one of them is injured, the companies usually furnish him with surgical or medical attendance, and provide for his care in some hospital until he can resume work, or until he recovers, if this is within two or three months; but this is done only on condition that he waives his claim against them for damages. Should he have received his injury in consequence of some act of courage, he generally receives some more liberal provision. In the opinion of experienced corporation counsel, of railway employees injured in this State not more than five per cent ever prosecute their claims by suit, and not more than one per cent, one-fifth of these, successfully.

RAILWAY INSURANCE.

One method of relieving the condition of employees who have suffered injuries, and the families of those who have been killed, which for several years past has been practised in England, and which in some ways is being practised in America, is Accident Insurance.

The number of persons, passengers and others, who are annually killed or injured on the railways of Great Britain, and the number of persons annually travelling by rail and exposing themselves to danger, attracted the attention of persons familiar with the law of chances which governs insurance and the management of its general business. While passengers, travelling occasionally, were willing to incur the expense of premiums, employees, as a class, were too poor to pay the large premiums which their constantly dangerous employment required. For their benefit another expedient was resorted to, more especially after the famous Henly dis-

aster. It was the organization among themselves, with the co-operation of some of the railroad corporations and proprietors of collieries, of mutual co-operative and provident societies.

The object of these societies was to provide something for the employees or their families in case of death, injury, sickness, superannuation, or inability to work from any accidental cause. Railroad employees and miners were generally too improvident to be willing to pay a quarterly or monthly stipend from their wages for the privilege of receiving an allowance upon the happening of so uncertain an event; and it was necessary that the various corporations and proprietors of mines should be induced to make the deduction of such an allowance compulsory upon those already in their service, or a pre-requisite to admission of others into their employment. As the funds collected must be held and invested, and paid over to the persons entitled to them in such amounts as had been prescribed, and the general duties incident to such a business must be performed by some persons in whom all the members had confidence, it was necessary for the associations to have paid officers. As the amounts which the employees were willing to have deducted each month or week as premiums from their wages were so small that only a small monthly or weekly allowance could be paid in case of death or injury, the corporations and proprietors found it for their several interests to co-operate with their workmen by contributing to the general fund, and by assuming, for the sake of saving expense, the duty of receiving, investing, and paying it out to the proper persons. At the present time there is one of these associations connected with almost every railroad in England, and with nearly every one of the large mines and mining districts. Some of them are large in number, one of them, called "The Northumberland and Durham Mines Permanent Relief Fund," numbering, in 1878, 70,000 members. A fixed allowance is paid over to each person entitled, whether the injury was caused by the negligence of a fellow-workman, or by his own negligence. Unless allowances were made to persons of each class, the scope of such an association would be comparatively limited; because, according to the reports

of the Royal Commission on Railway Accidents, published in the year 1877, there were, during the four years from 1872 to 1875, 2,720 railway servants killed through their own negligence, and 238 from causes beyond their own control; and there were 7,275 injured through their own negligence, and 1,724 from causes beyond their own control, — about twelve killed and four injured through their own fault, to one killed or injured through the fault of some one else.

The plan upon which these associations are organized may be illustrated by the plan of the one connected with the North Western Railway, which employs about 45,000 men, 24,000 of whom are engaged in the actual operation of trains. Connected with this railway are two associations, an insurance and a provident society, — one to provide assistance to men so unfortunate as to meet with accidents, and one to provide for the necessities of sickness. The first, in case of a death, pays over to the family a sum varying from £20 to £40; and, in case of permanent disablement, from £25 to £35, according to the class of risk taken, and the amount of the premium paid. In case of temporary disablement or illness, twelve shillings to fifteen shillings a week are paid for a period of twenty-six weeks, unless recovery takes place before; after this time has elapsed, a half allowance is paid. The premiums paid to the Insurance Society by the workmen, or rather deducted from their wages, vary, according to the class to which each belongs, from one penny to threepence a week; and those paid to the Provident Society vary from two to four pence a week. The company contributes to the general fund of both societies about £2,300 a year, together with all the fines which are imposed upon the men for neglect or disobedience of the rules, orders or regulations of the company. The representatives of a workman who has paid twopence a week to the Insurance Society would receive £35 in case of his death; were he temporarily disabled, he would at the utmost receive twelve shillings a week for twenty-six weeks, and half that allowance during the continuance of his disablement; were he permanently disabled, £25 in addition to whatever weekly allowance he had received; and, were he to die from natural causes, his representatives would receive £10. The allowance to the

representatives of a foreman or a servant of a higher grade, who pays a premium of threepence a week, is £40 in case of his death; if temporarily disabled, he receives 18 shillings a week for twenty-six weeks, and half allowance thereafter; if permanently disabled, £35 in addition to any weekly allowance he may have received. These societies were established in 1871-2, and numbered five years ago 25,000 servants of the London & North Western Railway. The Great Western, the Great Northern, and the Midland Railways have similar societies in an equally prosperous condition.

Of the Midland Railway Friendly Society, the Fourth Report of the Commissioners on Friendly Societies, presented to Parliament in 1874, which contains the fullest and most carefully prepared information upon this subject, says, Part 1, p. lxviii:—

“It is a peculiar feature, both in some of the railway friendly societies and of many of those in collieries, that membership is made compulsory by the employer.

“The Midland Railway Friendly Society, of which an account will be found in Mr. Stanley's Report, was established in 1860, and had, by 1871 8,295 members, and £7,500 capital. Rule 1 states that the directors ‘have resolved to require all those in their employment who receive weekly wages (subject to the exceptions under the rules) to become members;’ and Rule 5, that ‘it shall be imperative upon all servants employed in the passenger and goods departments, gangers, engine-drivers, and firemen receiving weekly wages, who may hereafter enter the service of the company, to become members of this society. This rule is applicable to every one as above who has been one month an appointed servant of the company, at wages exceeding 12s. a week. Officers and servants in receipt of salaries shall have the option of joining, or not, as they may elect.’

“The society is actively self-governed. Its financial organization does not, however, appear to be satisfactory, as its solvency depends not solely on contributions calculated according to the benefits assured, but partly on a fixed yearly grant from the railway company, which apparently was taken into account when fixing the rates of contribution, but which, in a society with a varying and probably increasing number of members, may or may not be sufficient for the purpose it affects to serve, and is probably relied on for serving.

“The contribution to the benefit is uniform, 9d. a fortnight. The benefits, are medical attendance and 12s. a week, full sick pay, for twenty-six weeks; then 6s. a week for twenty-six weeks; then 4s. a week for the rest of sickness or ordinary illness. If the member be disabled by accident in the course of his duties, he receives 15s. a week

for twenty-six weeks, then 7s. 6d. for twenty-six weeks, then 4s. In case of death from ordinary causes, the member's representatives receive £12. In case of death from accident in the service of the company, £25. There is a separate contribution of 3d. a fortnight for management, out of which the doctor is paid. The members' contributions are stopped out of their wages."

The London and South Western Friendly Society, organized upon a somewhat different plan, makes membership compulsory upon all servants in the traffic and freight department, and has rates of premiums graduated according to age, as general insurance companies have.

The largest associations are among the miners, the Northumberland and Durham Associations numbering, as already stated, 70,000 in 1878; although many thousands of miners in these districts had not then joined it, and nearly half of the owners of collieries had not subscribed to its fund. After a careful examination of its condition by an experienced actuary in 1878, when it had been seventeen years in operation, it was found possible to pay a pension worth £160 in case of death, or an allowance of eight shillings per week in case of permanent disablement, upon the payment by each member of a premium of twopence per week. The contributions of the employers amount to from fourteen to twenty per cent of the amount paid in by the men.

In the counties of Durham, Cumberland, and Staffordshire, as well as in other mining counties, there are likewise large associations which insure against sickness and accidents, some of them receiving contributions from the proprietors of collieries, and some of them aided by their co-operation in making membership compulsory. Among the lead-miners of Northumberland and Durham there is likewise a similar society, supported in the same way; and, although membership is not made compulsory, about three-fourths of the workmen in the mines are members. An allowance of ten shillings a week, in case of sickness or accident, is paid upon a premium of fivepence per week; and, in case of death, £20 upon a premium of twopence per week.

Besides these various associations, there is also, in connection with some of the railroads, — the North Western,

for example, — a pension list for the salaried staff, such as station-masters, clerks, and all above their grade, which, in the instance cited, is already supported by a large fund made up of assessments upon the members and contributions from the company. It is exclusively for the benefit of the salaried staff, and provides for cases of superannuation, as well as disability from illness or accident. In Yorkshire, the miners belonging to the association were paid, in consequence of injury, during the three years ending with 1876, the sum of £29,000; and during the five years ending with 1875, no less than 711 persons lost their lives in the mines from explosions of fire-damp, the falling in of roofs and coal, from accidents in shafts, and from other causes.

This species of insurance, which is but the adaptation of the general principles of insurance, and the special features of accident insurance, to associations of this kind, has been in successful operation in Germany for many years; and the English could have learned, if they did not, all the principles upon which their societies are formed, from the miners' associations of Germany. It had reached such a stage of general development seventeen years ago, that it was provided by the *Allgemeineis Berggesetz* — General Mining Laws — of June 24, 1865, applicable to all mines, and furnaces for the smelting of ore, that every mining district should have its own *Knappschafts-Verein* — Workman's Association, — whose constitution should be subject to the approval of the local authorities, and in which membership should be taken by both masters and workmen. By the form of constitution prescribed, every member must pay into a common fund a small proportion of his wages, or allow his employer to deduct from his wages a fixed amount, and pay it in for him. The employer is also obliged to pay in a certain sum, usually amounting to about one-half the sum contributed by the men. The object of these associations is to make some provision, in colloquial phrase, for a rainy day; some provision to meet the exigencies of accident, sickness, or death; some provision in sickness for medicine and medical attendance; together with a regular allowance for the support of any member, if necessary, for the rest of his life, or during his temporary disablement;

or, in case of his death, to give him a decent burial, and take care of his children till they reach the age of fourteen, and his widow during her life, or until she marries again. All associations of miners already formed were obliged to conform to this law, and adopt the form of constitution which it prescribed. In matters of this kind, and in almost all matters which relate to the general protection of the poorer classes, and the distribution of charities, the New World can learn much from the Old, where, in an older form of society, such problems were much earlier presented to social scientists for solution. The system has worked well both in England and Germany. It was necessary to make this form of insurance compulsory, because many workmen would not otherwise make suitable provision for the future, and employers would not otherwise lend their co-operation. If looked upon simply as a provision against the need of public charity, it has been of great service, by keeping indigent miners out of the workhouse. A peculiar feature of the German law provides that the courts may, upon proper request, determine whether the sum paid by way of assistance shall all be paid at once, or by weekly or monthly instalments; and so thoroughly has the system become established, that it is not uncommon now for large employers of labor to insure themselves, in one general policy, against loss by the payment of damages and assessments for injuries to their workmen. And this practice is not uncommon in Great Britain, especially since the passage, in 1880, of the Employers' Liability Act. In these two ways the workman is insured by the association to which he belongs, and his employer by some general insurance company.

In the United States the principal experiment in this class of insurance, on the mutual contribution plan, is that of the Baltimore & Ohio Railroad Company. The employees of this company have an association, organized in May, 1880, under the name of the Baltimore and Ohio Employees' Relief Association. This organization is in successful operation, and its scheme is the best for the employees of American railroads. It is so complete, we have given in Appendix B the letter of the company proposing the plan, and the constitution and by-laws of the associa-

tion. This association has been incorporated by the Maryland legislature by Act of May 3, 1882. Should kindred associations be formed in this State, they could be incorporated under our general laws. There might be a combination of several or all the railroad companies of the State for the formation of such an association, or of the factories of a place or of a county. There seems to be no doubt that with such associations in existence, and in successful operation, much progress would be witnessed in the creation of harmony between employers and employees.

When this question of insurance is considered in connection with the general question under discussion, it is naturally asked whether the provision thereby made for employees, should such a system be adopted in this country, might not be an ample substitute for the proposed increase of the liability of employers. And, while it is true that such a form of insurance would meet the necessities of many more employees than would the proposed change in the law of liability, it is equally true, that because some provision has been made for an employee who has been injured through his own carelessness, is no reason for refusing to make additional legal provision for a person who has been injured through the carelessness of his employer. The first person could in no case recover damages, because the injury was caused by his own contributory negligence. Has not the second person, whose injury was caused by the negligence of his employer, a moral, and ought he not to have a legal, right to receive the additional protection and assistance of compensation in damages for the injury inflicted upon him?

Inasmuch as railroad companies are not charitable institutions, but, like all other business enterprises, are managed chiefly in the interest of the stockholders who furnish the capital, is it impossible that the annual contributions of the companies are made on the basis of the total sum annually paid for damages and assistance to employees? If so, are not the employees who are injured by companies' negligence actually contributing largely to the funds out of which the employees injured by their own negligence receive their money? The force of this inquiry is even more apparent

when considered in connection with the proposals made, after the English act was passed, by railroad companies to increase their contributions, on condition that their employees would contract themselves out of the operation of the act. The employer should not be asked to help pay damages resulting from injuries caused by the negligence of the employer's agent. And it is worthy of remark, that when this same question came under the consideration of the select committees of Parliament, then investigating the general subject, and the amounts paid by way of insurance were stated by the managers of the various railways, the committees looked upon the small stipend which the employee thereby receives as only a make-shift, and no equivalent for the wrong and misery he had suffered. Why should he who has been injured by another, stand upon the same legal plane with him, who, by his own act, has injured himself?

INFREQUENCY OF THE RECOVERY OF DAMAGES.

While, during the nine years ending with Sept. 30, 1881, 358 employees were killed upon the railroads of this Commonwealth, and 653 were reported as injured, it is improbable, — so strictly is the law of contributory negligence enforced, so easy is it to avoid liability under the rule requiring an employer to exercise due care in the selection and repair of his machinery, and under the other rule enforcing liability where there is personal interference or supervision, — that in less than ten per cent of these cases have any damages been recovered. And yet, if it is safe to accept the opinion of a man of such large experience and information as Mr. Evans, as well as to believe that the railways of Great Britain and Ireland are as safely managed as our own, at least one-half of these deaths and injuries are in part remotely due to one or more of the six causes mentioned in the memorial of the ten thousand English railway employees; viz., 1, excessive hours of labor; 2, non-enforcement of certain of the companies' rules, ostensibly made for the protection of the men; 3, the non adoption of the most approved appliances conducive to safety in the working of railways; 4, the want of proper accommodations for work-

ing the freight and traffic; 5, the employment of inefficient persons for the performance of responsible duties; 6, the employment of an insufficient number of men.

During four years not a single instance of the recovery of damages by an employee came to the knowledge of any of the officers of the Society of Railway Servants; although during the four years from 1872 to 1875, inclusive, according to the reports of the Royal Commission, 238 were reported killed, and 172 injured, from causes beyond their own control. This shows the severity of the present law, allowing common employment to be a defence to such actions. In this connection it may be remembered that of 83 employees killed on the London and North Western Railway in 1876, only six, or about eight per cent, were killed, said the general manager, from causes beyond their own control. And Mr. Moon, chairman of the Board of Directors of this railway, which employs about 50,000 men, said, at a meeting of some of the employees, called to consider whether to accept the provisions of the "Employers' Liability Act," that in not more than two per cent of the cases resulting in death or injury could damages be recovered. It is impossible to give a satisfactory estimate of the number of cases in our own State, because the reports of and to the Railroad Commissioners are not sufficiently explicit, and there are no reports of accidents occurring in mechanical industries, upon which to base an intelligent estimate.

SHOULD THE SAME PRINCIPLE BE APPLIED TO DEFECTS IN MACHINERY?

Under the law, as it stands at present, the employer is held to a stricter responsibility to third persons than to his employees, for injuries caused by defects in machinery and plant; and, if his liability to third persons and employees, for injuries caused by the neglect of his servants and agents, is to be made the same, should it not, upon a like principle and for equally sound reasons, be made the same for injuries caused by defects in machinery? At present the employer is responsible in damages to third persons for injuries caused by defects in his tools, implements, works, machinery and plant, which reasonable care on his part could have discov-

ered and obviated; though not for secret defects resulting from the negligence of persons from whom he bought the tools, machinery, etc., used in the business.

The principal reason at the basis of this liability is, that, as some one must take the risk of defects, it is less unjust for him to take it who makes or buys the machinery or plant, who can accept or reject them, who owns and uses them, who ought to keep them in repair, and can direct when they should be repaired, or, when worn out, replaced, than for strangers who know nothing about the machinery or plant. If the employer's liability is to be increased in respect to personal damages caused by the acts of his agents, why should it not be increased in respect to damages likewise caused by the negligence of agents in omitting to discover and remedy the defects?

He is now liable to employees only for defects known personally to himself, and unknown to the servant injured, — in other words, for defects which have come within his own knowledge or information. The practical difficulty of proving in court at a trial this actual knowledge or information, makes such a liability almost a barren security. But if, as is almost always the case in mechanical and manufacturing employments, the tools or machinery are not used by himself, but by his servants, employees, and agents, he is entirely free from responsibility. Such a burden of risk as is imposed upon him in his relations to third persons is entirely removed, and the servant must take the risk upon himself. Unless the employer is made responsible for the acts of his agents, he is not obliged to use even reasonable care in selecting tools and machinery, and keeping them in good condition, in detecting and obviating any defects. He may, so far as this liability to his employees is concerned, allow his servants to do as they please; to select unsuitable machinery, unsuitable in design or execution; to neglect to take proper care of it; may allow them to use it in a careless and improper manner, and therefore escape the consequences of their negligence. When it is remembered that this extension of the rule would not make him liable for secret defects, nor defects which a reasonable care could not discover and obviate, nor defects of which the person injured was aware, either through his

own knowledge or the information of others, the danger of extending the rule does not seem so great.

ARE THERE ANY AGENTS FOR WHOSE ACTS THE EMPLOYER
SHOULD BE MADE LIABLE?

In considering the application of any practical method of making responsible large employers of labor, such as railroad corporations, the owners of factories and mines, and persons carrying on any large mercantile, manufacturing, or mechanical business, with employees arranged in different classes, the superior having authority over the inferior grades, the question at once arises, For the acts of what agents should the employer be made liable, in order that the objects sought by a change in the law may be better accomplished? The general object to be accomplished is, in the words of Lord Sherbrooke, to make "the funds of every industrial undertaking liable to compensate any person employed in such undertaking for any injury he may receive by reason of the negligence of any person exercising authority mediately or immediately derived from the owners of such undertaking." To accomplish this object there seems to be no other way than to make the employer liable for the negligence of every superior workman, in whatever grade, from the employer down, who has authority over the servant injured. For instance, as a brakeman on a freight train might be injured by the negligent act, order, or direction of the board of directors, the superintendent, the general freight agent or the conductor of his train, each of whom is vested with authority over him, — it would be necessary, lest the corporation should escape liability for the negligence of some one of them, to make it liable for the negligence of all of them. In an employment where the labor is in such a way classified, where authority may be delegated and sub-delegated, the master should be made liable for the negligence of every man in the chain between the master and the injured employee. When the Parliamentary Committees had this subject under consideration, George Findlay, the Traffic Manager of the London and North Western Railway, being asked where the line of responsibility should be drawn, said that it was no use to make the corporation

liable for the acts of the manager alone; "you must make every man in active control over the staff" [ordinary employees] "responsible, if you are to accomplish the objects of those who brought in this bill;" so great is the authority over the management of trains necessarily left with officers of inferior grades. And James Grierson, the General Manager of the Western Railway, in corroborating this opinion, illustrated it by saying, "In fact, take the case of a signalman at a junction or a station: he then, in fact, is the manager of the railway for the time-being; he has the control of the drivers and the guards, and it is under his instructions that the work is carried on; by a mistake of his an accident occurs, and a driver [engineer] is killed." Mr. Justice Willes, in the case of *Murray v. Currie*,* has suggested the rule which should be followed out in determining this liability. "I apprehend," he says, "it to be a clear rule, in ascertaining who is liable for the act of a wrong-doer, that you must look to the wrong-doer himself, or to the first person in the ascending line, who is the employer and has control of the work." Where there are other workmen vested with authority which the wrong-doer is bound to obey, and intervening between him and the employer, under the legitimate extension of this rule, he should be responsible for their acts. Reference to section 1 of the Liability Act (Appendix A) will show how the English Parliament expressed in words the object sought to be accomplished.

SHOULD THE LIABILITY BE LIMITED IN AMOUNT?

The question naturally occurs whether any limit should be placed upon the amount of damages which can be recovered. In the third section of the English act, the Conservatives, after somewhat narrowing, by section 2, the nature of the liability created by the first section, affixed a limit to the sum which could be recovered equal to the estimated earnings for the three years preceding the injury.

This section prevented a man thrown out of employment for four years or more, made a sufferer for years, or a cripple for life, from recovering more than three years' wages. It

* 6 L. P. 24.

is not easy to see why all injuries should be treated alike. It is a crude justice which declines to discriminate between dissimilar cases, to investigate the circumstances of each case, to consider the facts on both sides, to weigh the evidence in the scales of a wise discretion, and mete out justice in unequal measure, as the unequal merits of different cases require. What would be thought of a criminal code which punished alike all crimes above a misdemeanor? which attached the same penalty to arson, highway robbery, rape, manslaughter, high treason, and murder? In the progress of criminal injustice towards justice, especially since Jeremy Bentham pointed out the necessity of reforming so many of its abuses, legislatures and judges have become more in the habit of distinguishing between the differing grades of crime, and no longer are all the higher offences punishable with death. What would be thought of a system of rewards and punishments, which bestowed the same praise upon the school-boy who learned his lessons well; upon the statesman or soldier who saved the State from anarchy and disunion; upon Grace Darling, for saving human lives at her own peril; upon Philip Sidney, for giving a glass of water to a soldier dying on the battle-field, more in need than himself? Such legislation as limits the amount of damages to three years' earnings is a step backward. What occasion exists for adopting so unjust a rule in relation to employees, when all other questions of damage are determined upon their merits, — upon the circumstances of each particular case? Damages to the person, to real estate, and to personal property, are assessed by courts or juries as each case requires. Why should such a distinction be drawn against employees? Is it said that juries generally award damages against corporations and wealthy employers? The obvious answer is, that they generally deserve a verdict against them; that in a very large majority of instances the plaintiff in a suit at law deserves a favorable verdict. If objection is made to the jury system as unjust to corporations, why is not the rule made general, that in no instance shall damages above a certain amount be recovered against them? If it is said that this rule has been adopted in relation to highway damages against towns, may it not be asked whether such a precedent ought to be followed?

SHOULD THE EMPLOYEE BE ALLOWED TO MAKE A CONTRACT
RELEASING HIS EMPLOYER FROM LIABILITY?

After the passage of the English Act, the question arose whether the employee could and would contract himself out of the operation of the act. There was nothing in it permitting or forbidding such a contract; and some of the large railroads and mining corporations attempted to compel their laborers to sign contracts of hire releasing them from liability for damages. There was no law to prevent the workmen from signing such contracts; but they were urged not to do so by their own reason and interest, as well as by the advice of Mr. Macdonald, Mr. William Crawford, Secretary of the Durham Miners, Mr. Benjamin Pickard, Secretary of the West Yorkshire Miners, and every one else who had earnestly labored to secure the passage of the act. Having obtained, after years of labor and agitation, a law of some benefit,—though the benefit was not so great as had been hoped for,—it seemed the height of folly to sign it away.

The chief, if not the only, advantage offered in consideration of this release, was an extension and enlargement of the benefits of insurance. The same paltry benefit which had been used to restrain the passage of the bill while it was before Parliament,—the benefit of receiving, upon payment by them of half the insurance premiums, a continuance of their wages for a few weeks or months, with an allowance of £40 or £50 in case of death,—was again offered to them, together with an increase amounting to about two-thirds of what they were already entitled to, provided they would sign away their rights under the act. Unless they would do this, they were in some instances threatened with a discharge from employment, and a discontinuance of the small contributions already made to their fund. In some places large public meetings were called to listen to these proposals, and to consider the wisdom of adopting them. There were several large meetings,—one in Liverpool,—of the employees of the London and North Western Railway, which were addressed by officers of the company, and also by their fellow-workmen. In most instances the workmen voted to adhere to their rights under the act. At some of the meet-

ings the vote was unanimous against bartering them away for what were thought trivial considerations. The clause limiting liability to the amount of three years' wages had made it impossible in general to recover more than from £150 to £200; and, because contributory negligence prevented the recovery of damages in all but from two to ten per cent of the cases of injury, the benefits of the act were in reality less than they at first sight appeared to be. But when the excitement had somewhat subsided, and the miners and laborers realized how slight the advantages given them really were, there was little doubt that more harmonious counsels would in many instances prevail, and that, in exchange for a more liberal extension of the benefits of mutual insurance, many of the laborers would be willing to contract themselves out of the act. The clause limiting liability to three years' wages, and the lack of any clause forbidding the making of any contract of release, were the powerful levers used by the employers to secure the adoption of their scheme of mutual insurance. In Durham, West Yorkshire, and other mining districts, it was for awhile feared that trouble might arise; and strikes were apprehended from the course adopted in some of the collieries of threatening to withdraw further contributions to the laborers' insurance and protective fund, as well as in consequence of the refusal to allow them to work, unless they would sign the contract waiving their right to damages.

The injustice of attempting to compel the laborer to sign such a contract, is manifest from the consideration that he is usually less able than the employer to care for himself, less provident and thoughtful for the future, and more ready, upon a slight necessity, to sacrifice a future advantage for a present benefit. Their positions are unequal. While in general there might be a difference of opinion as to the wisdom of making laws to restrict the right of contract, there is as little room as possible for a difference of opinion as to the need of affording the laborer some legislative protection. If ever a law restricting the right of contract ought to be made, if ever the State should extend over workmen a wider protection, making them, as seamen and minors are made, to a certain degree, wards of the State, it should be by prevent-

ing them from signing away their right to recover damages for personal injuries, which the delusion of hope so easily makes them believe is in reality a worthless benefit.

It is the lack of such a provision as this which has made the English Act of little value; has, during the past two years, kept the relation of employer and employed unstable and uncertain; has encouraged the former to persevere in getting the employee to sign a release of liability, and has encouraged the employee to persevere in hoping that Parliament would come to his relief by amending the law.

In January 1881, and within three weeks of the time when the English Act went into operation, Mr. Macdonald, Mr. Broadhurst, Mr. Burt, and Mr. Peddie, members of Parliament, introduced a bill to amend the law in this particular, by providing that the act of 1880 "should have effect, and be enforced by every court in every case, notwithstanding any contract or agreement excluding all or any of the provisions of said act, or otherwise interfering with the operation thereof: provided (1), that this act shall not affect any contract or agreement made before the passing of this act; and (2), that in determining in any case the amount of compensation payable under the said act by an employer, the court shall take into consideration the value of any payment or contribution made by such employer to such insurance fund or compensation fund, to the extent to which any person who would otherwise be entitled to the compensation under the act, has actually received compensation out of such payment or contribution at the expense of such employer." This bill was prepared to meet the exigencies which it was foreseen would arise, by the Parliamentary Committee of the Trades Union Congress. It failed at that time to gain the co-operation of the Gladstone Ministry, because, as Mr. Dodson, who had charge, for the Government, of the Act of 1880 in its passage through the House of Commons, said, when the amendment was introduced, in answer to a question by Mr. Sheridan: "The Government have no intention, at all events before full experience of the working of the act, to propose a bill to amend its provisions. I especially hope that the power of free contract will, if resorted to, be used with such good sense, fairness, and mod-

eration by all concerned, that no occasion will arise for curtailing it in the interest of any party ;" which meant, perhaps, that if the employer made an unfair use of the right of free contract, the Government would pass the amendment. The subject is still, at this writing, under discussion in England, in the press, among the employees, and in Parliament. The law of this Commonwealth at present protects the employee in this respect.

Chapter 74, section 3, of the Public Statutes says : " No person or corporation shall, by a special contract with persons in his or its employ, exempt himself or itself from any liability which he or it might otherwise be under to such persons for injuries suffered by them in their employment, and which result from the employer's own negligence, or from the negligence of other persons in his or its employ."

SHORT HISTORY OF THE PASSAGE OF THE ENGLISH BILL.

After several years of discussion and agitation, the question of allowing workmen the same right to recover damages of their employers that other persons have, at last reached such a stage of advancement that it was thought advisable for the English Liberals to adopt the idea as a part of their political creed, in order to secure the votes of workmen who were in favor of it. This question was only a branch of the general subject of the rights of labor, which has been before the English people so many years ; has resulted in the formation of separate societies, trades and protective unions ; and has found advocates among the ablest and most liberal men of the Liberal party, by whom the rights of labor have been advocated in Parliament. And this reform, like many others, has gained its way gradually through the agency of a separate political organization. At the last general election, in 1879-80, the candidates at almost all the hustings throughout Great Britain were asked, before the polls were opened, if they would support this measure, and it was made a party issue. For eight or more years the question had been before the English people and Parliament ; had received general public consideration ; and its friends were too conversant with the arts of successful agitation and reform, to neglect so auspicious an opportunity

to secure a change in the law. On the 10th of February, 1880, the bill presented by the Earl De la Warr—which, with some amendments, on the 7th of September following became a law—was ordered printed by the House of Lords; but the session had progressed into the summer before the House of Commons went into committee for a discussion of the bill. Mr. A. Macdonald, who has since died, was one of the leaders in the cause. This bill fell so far below the wants of the foremost advocates of a change in the law, that Sir Henry Jackson expressed himself as altogether dissatisfied with it; and Mr. Pease feared the bill would do more harm than good to those whom it was intended to benefit.

The Parliamentary discussion, begun in July, was carried on at many sittings through that and the following month, Mr. Dodson having charge of the bill in behalf of the Government. As is usual in such cases, various amendments were proposed by conservative members hostile to the measure, among the first of which was one relating to the subject of mutual insurance,—a make-shift which has been urged through all the progress of this reform, from the time of its earliest discussion down to the present day, and which still threatens to defeat the objects of the act. It is not impossible that the accident insurance companies, which have been, and will probably continue to be, the principal gainers by this amendment, may have early been its promoters. Another amendment easily made, persistently urged, defeated in the House of Commons, but finally adopted in the House of Lords under the leadership of Lord Beaconsfield, limited the amount of compensation which could be recovered to the estimated earnings of the three years preceding the injury.

Another amendment, which forms the fifth sub-section of section 1, relating to damages recoverable by railway employees, at a general conference of members of Parliament, workingmen, railway servants, and their representatives, held before the bill was reported to the House, was deemed very unsatisfactory, but was finally assented to on the ground that it was the best that could probably be obtained in opposition to the powerful influence of the railroad lobby. In connection with the subject of accident insurance, it was stated in a published letter, by Mr. David Chadwick, after

a careful investigation, that upon the payment of six shillings a year by the workmen, and £200 by their employer, 3,000 persons could be insured, each in the sum of £50, to be paid in case of accidental death.

One of the motions to defeat the bill was made by Mr. Gorst to include within its operation all the workmen employed in Her Majesty's arsenals and dock-yards; and supported by Mr. Boord, Sir H. Wolff, Sir H. Holland and Mr. Newdegate. But the Attorney General and Mr. Childers pointed out that by a Treasury Minute the men in the dock-yards now enjoyed greater privileges than they would receive under the bill. Instead of receiving, in case of injury, compensation equal in amount to three years' wages, the "establishment men," so called, might be granted by the Treasury a maximum compensation equal to ten years' wages; and the non-establishment men might receive a sum equal in amount to their wages for nine years. In case of death, their widows and children would receive larger gratuities than this bill allowed; but it was, of course, discretionary with the Treasury to grant any allowance of any kind.

Before the bill passed the House of Lords, a powerful opposition was aroused. The associated coal owners of South Wales threatened, in case of its passage, to withdraw their contributions to the insurance fund; which was somewhat of an empty threat, because their contributions did not equal 25 per cent of the total premiums of the men. At the half-yearly meeting of the London and North Western Railway, Mr. Moon, the chairman of the Board of Directors, declared that the capitalists had not a fair hearing before Parliament; and he was, as it now appears, unnecessarily afraid that the passage of the bill would "drive the capital of the country away." And at the North London Railway meeting at Euston Station, on the day after the bill passed the House of Commons, Mr. Bancroft, the chairman, made especial objection to the fifth sub-section of section 1, relating to railways, which had been added as an amendment to the original bill, because it was feared that without it railway companies might escape the imposition of suitable liabilities. But he expressed himself as willing to submit to the other provisions of this section.

The master-builders — how many is not known — petitioned the House of Lords to have the third sub-section of section 1 stricken out; because, as this section stands, with the definition afterwards given to the expression “person who has superintendence entrusted to him,” the defence of common employment is almost altogether abolished; and likewise proposed an amendment to the fourth sub-section, which was afterwards substantially adopted as the third sub-section of section 2; and the powerful aid of Lord Cairns, a Conservative Ex-Chancellor, was invoked.

The former wrote for publication a letter in which, — while saying that the railway companies ought not to complain because they are obliged to assume towards their employees the same responsibility as they agreed, when they received their charters, to assume towards their passengers, — he expressed the opinion that freedom of contract ought not to be restrained.

Lord Cairns, in a letter to the “Times” signed “C,” while acknowledging the right of the workman to say that for the future he declines to be considered as making, at the time he enters into his employer’s service, an implied contract to run the risks of the employment, objects to the substitution attempted by the bill, of what he calls a Parliamentary contract of employers’ liability, for an implied contract of non-liability. He proposes to “get rid of the judge-made law of implied contract by a short enactment, that where a workman would otherwise be entitled to an action for negligence against his employer, he shall not be defeated merely by the circumstance that he and the person actually causing the injury were in a common employment; with a declaration that this enactment is not to interfere with any express contract on the subject which the employed and the employer may make.”

As Lord Cairns enjoys, with Lord Justice Blackburn, the enviable distinction of being one of the two ablest of living English judges, — if the merit of judicial opinions is to be taken as the criterion, — it will be well, perhaps, to print the entire letter: —

“The Employers’ Liability Bill has passed the House of Commons. At this season of the year it is impossible that there can be a real con-

sideration of such a bill by the House of Lords. I do not wish to inquire whose fault this is, or whether it is the fault of any one: I only desire to state what is the fact. The discussion of the measure in the House of Commons has shown one thing, if it has shown nothing else, — that the subject is much more difficult than was commonly supposed. An attempt has been made to lay down certain formulas or rules which are to meet each and every variety of the infinitely varying trades, employments and industries of the country. The result has been the introduction into the bill of a series of qualifications, modifications, limitations, exemptions and enlargements, which must necessarily lead to much uncertainty, great litigation, considerable ill-feeling, and probably considerable disappointment, and to a mass of new law gradually manufactured by judges, or, what is worse, by juries. These reflections, and the circumstance that it is in your columns alone that a deliberate hearing can now be obtained, induce me to ask in this way, Is it clear that this legislation begins at the right end? Or, rather, is it not clear that it begins at the wrong end? How or why is it necessary that Parliament should step in and define when and to what extent an employer of any of the various forms of labor in this country shall be liable to his workman for an injury occasioned by the negligence of a fellow-workman? Some fifty years ago the courts of law laid down that it was an implied term in every contract of hiring that the person hired took the risk of any negligence in a fellow-workman. This was not an unreasonable supposition in itself, and it was probably not untrue in fact, as things then stood. But there cannot continue to be an implied term in contracts where one of the parties to the contracts distinctly repudiates the existence of any such term. That is now the position of the workmen. They say, in substance, that whatever express contracts they may be willing to make, they have not made, and do not choose to have it asserted that they have made, a contract containing this implied term.

“It appears to me that this is the crucial question which the legislature have to meet, and that it would be better either to meet it directly, or else to leave the law as it stands. The present bill does not meet the question. It proposes to substitute, for the implied contract which the workmen disavow, another special Parliamentary contract, which neither employers nor employed have ever entered into, which they probably do not understand, and which, in numberless cases, will be found in practice to be so irksome to one or other or both of the parties, that they will begin at once to contract themselves out of the act. My proposal would be to get rid of the judge-made law of implied contract by a short enactment, that where a workman would otherwise be entitled to an action for negligence against his employer, he shall not be defeated merely by the circumstance that, he and the person actually causing the injury were in a common employment; with a declaration that this enactment is not to interfere with any express contract on the subject which the employed and the employer may make. The result of such an enactment would be that every employer and workman would make the contract which would

be suitable for the particular employment. One employer would set up a system of insurance; another would indicate the particular servants for whose acts alone he would be answerable. Some might exclude particular risks, or make the liability or freedom from liability enter as an ingredient into the amount of wages. The employers and workmen are best able to understand their own work and their own interests. They are quite competent to make their own bargain on equal terms, and to regulate, so far as it is right to do so, the rate of wages by the amount of risk incurred. It may be said that a contract may, as the bill stands, be made to supersede the bill. My answer is, that the moral and social effect, where Parliament merely removes legal difficulties, and invites parties to make their contracts in the way that best suits them, is very different from the effect of a bill which makes, as it were, a Parliamentary contract for the parties, and then drives them by its inaptitude to make stipulations against it. I cannot think that the present bill, if it passes, can settle this question, and it may not be too late to suggest a more lasting solution of it."

When the bill came up in the House of Lords, the Lord Chancellor, Lord Selborne, explained at considerable length the condition of the law and the provisions of the bill, together with their probable effect, citing the law of France and of Germany as in harmony with the change proposed, as well as the law of the State of Missouri in this country. But, in this single particular, as has been seen, he seems to have been misinformed; for the effect of the Missouri statute was destroyed by the decision* of the judges that the phrase "any person" did not include a "fellow-servant." He closed with suggesting, on behalf of the government, two slight amendments.

Viscount Cranbrook commenced, on the part of the Conservatives, the discussion in opposition, using various arguments, not forgetting to present the horror so often apprehended by legislative assemblies, that law attorneys would profit by the litigation with which the country was in danger of being deluged. These apprehensions seem to have been groundless, as, during the first year in which the act was in operation, only thirteen claims, says an English law journal, were brought, of which five were unsuccessful, and the damages recovered in the other eight amounted on an average to £83.

Without attempting to give a summary of the dispute and

* See *ante*, pp. 41 and 42.

the arguments, which were in the main a repetition of the objections already discussed, the result will perhaps be understood by remembering that, on motion of Lord Bra-bourne, sub-section three of section 1 was stricken out, but afterwards agreed to because the Commons insisted upon its insertion; and the operation of the act was limited, upon the motion of the Earl of Beaconsfield, to Dec. 31, 1887, — seven years. The genius of legislation is compromise; but so much was given up on both sides, that neither the friends nor opponents of the measure were satisfied, and the employees are now insisting upon further legislation.

This history of the passage of the English act has been given to show the difficulty attending the reversal of a principle of common law, and to aid the discussion of the measure to come before our own legislature.

THE OPERATION OF THE ACT.

The passage of an act, limited in its operation to seven years, which restricted the amount of compensation to be recovered to three years' earnings, and which, according to the opinion of Mr. Moon, the chairman of the London and North Western Railway, was applicable to not more than two per cent of all the cases of death or injury occurring to employees, would not seem to be the occasion for strikes and disagreements between employers and the employed. And yet some large employers of labor had believed, or during the excitement of public speaking had worked themselves up to the belief, that the act would create a revolution in existing relations, would drive capital out of the country and laborers out of employment, and prove a hardship to one class, and of no benefit to the other. Why the hardship of paying damages is not correspondingly a benefit to the persons receiving them, is not apparent.

The act was to go into effect on the 1st of January, 1881, about four months after its passage; and the first question presented to both parties was whether the workmen could contract themselves out of it. Almost all the solicitors thought such a contract valid; but one of the judges, before whom a claim was presented, thought that to allow such a contract would be against public policy. The Attorney

General, Sir Henry James, said, in reply to a communication from the secretary of the Amalgamated Society of Railway Servants, asking if the signing by a workman of a release from all liability would, in the event of his death, prevent his widow and children from recovering damages :—

“ In the event of a railway servant contracting to relieve the company of liability under the Employers' Liability Act, the company would not be liable, in case of his death, to the man's personal representatives, any more than they would be to him if injured and living.”

Having ascertained that a contract of release would defeat any claim for damages, some of the large employers of labor, unnecessarily apprehensive, as it now appears, began to take measures to secure such a release from each of their workmen ; and, in order to accomplish this purpose, made proposals to extend the benefits of the insurance funds by increasing their subscriptions, and threatened to withdraw the subscriptions they were then making, and perhaps to discontinue work, unless those proposals were accepted. The summary discontinuance of labor called a strike is usually too great an injury to the employer, and the proprietors of mines have of late had too bitter an experience, to warrant their incurring, without due deliberation, the risk of such an event. However, the course which they pursued, without, perhaps, a sufficiently careful estimation of the value of the object sought, precipitated strikes in some of the mining districts, of short duration, to be sure, but sufficiently severe to raise the price of coals at Manchester, through the inability of the collieries to supply the demand of the factories, to almost famine prices.

In reviewing, in the light of to-day, the disagreements which attended the attempt of the employers, railroads corporations and proprietors of collieries, to obtain over their workmen what seems to be so paltry an advantage, it seems strange that a more careful estimate was not made of the benefit sought. It seems strange, if it is true, as reported by a leading law journal, that during the first eleven months eight judgments, amounting in all to £664, were obtained, that such ignorance as prevailed should have been allowed to blind the eyes of so many people ; strange that the leaders

in this reform should not have better estimated the benefits which they hoped to confer upon the workingmen; and stranger still, that intelligent employers, with the best of opportunities for ascertaining their probable liabilities, with the facts in possession or within reach upon which to base a reliable estimate of the vast proportion of cases of injury cut off from the recovery of damages by the contributory negligence of the sufferers, should not have more readily acceded to the wishes of the promoters of this act.

The expectation that the flood-gates of litigation would be opened, and the courts deluged with actions for damages, happily has not been realized. Upon the authority of the "Law Times," a conservative journal of the proceedings of the courts, it is stated that during the first eighteen months of the operation of the act, less than one hundred cases had been brought to trial, a fair proportion of which had proved successful; that probably less than £3,000 had been recovered in damages, and an equal amount in costs; and, if the past year may be taken as a test, "the individual employer would almost be deemed justified in regarding his risk in the same extraordinary way as the risk from lightning or foreign invasion. Moreover, against this risk he can insure by payment of almost nominal rates." And, while the doctrine of common employment remains almost as before, there has been, on account of the ambiguity of the act, and the uncertainty as to its meaning, little gained for the employees except under the section relating to railways. This is not the first attempt at reform, which, in consequence of the legal astuteness of its opponents, has proved abortive.

With the first clause, which made them liable for "any defect in the condition of their ways, works, machinery and plant," the opponents of the bill seem to have expressed no dissatisfaction. With the second clause, which made them liable "for the negligence of any person in the service of the employer who has any superintendence entrusted to him," they seem to have been satisfied. Against the fourth clause, which made them liable for "the act or omission of any person in the service of the employer, done or made in obedience to the rules or by-laws of the employer," etc., they seem to have made little opposition, and to have been satisfied

with the amendment made to it, providing "that where a rule or by-law has been approved or has been accepted as a proper rule or by-law by one of Her Majesty's principal secretaries of State, or by the Board of Trade, or any other department of the government, under or by virtue of an act of Parliament," etc., which allowed a railroad corporation or the proprietors of a mine or factory, or any employer of labor, to submit the body of rules and by-laws, made for the government of its workmen and the general conduct of its business, to proper government officers for approval; and if they were approved, the employer was released from liability under that clause of the act. And clause five, which made every railroad corporation liable for "the negligence of any person in the service of the employer, who has the charge or control of any signal, points, locomotive engine, or train upon a railway," does not seem to have been considered by several of the railroad companies as imposing a very unreasonable responsibility, does not appear to have caused, during almost two years, a loss worth considering by a wealthy corporation. It seems to have assisted, by awakening through fear of losses an unusual anxiety concerning the lives of their passengers, in creating a more general confidence in the safety of railway travel; and, if the immediate effect of the act has not been altogether what was expected by its friends, the remote effect has been a general benefit to the general public. Although this real or fancied security may not be lasting, because the railroad companies may soon relax the unusual efforts they have been impelled of late to make, it would seem at this time as though the substantial benefit which the workingman has failed to get under this clause has been realized by the general public.

Clause three, which imposed liability for "the negligence of any person in the service of the employer to whose orders or directions the workman at the time of the injury was bound to conform, and did conform, where such injury resulted from his having so conformed," awakened the most apprehension, because of the vague uncertainty as to how heavy a responsibility was really imposed. Lord Bra-bourne, at the instigation of some of the master-builders, vainly attempted, as has been said, to prevent its passage

through the House of Lords. The apprehension awakened by it seems, however, to have been unnecessary; for, upon the best information obtained, it has not permitted the recovery, in a single year, of an amount of damages equal to the sum total of the judgments ordinarily obtained in a single week in the municipal court of the city of Boston.

The resolution of the legislature directed an examination of the law and an investigation of the facts bearing upon this subject, which has been done fairly and candidly, as an inquiry after information, and not as an attempt to prove a theory. And, so far as the operation of the English act is concerned, it seems just to say that, in the direct benefit conferred upon workmen in the form of damages for personal injuries, it has fallen far short of the anticipations of its promoters. The amount of labor expended by some of them in securing its passage seems to have been well directed, but to have fallen short of their sincere desire to benefit a deserving class of men.

In view of the efforts being made in some of the mining districts to compel the miners to sign contracts of release, and of the fact that notices were being served upon them to the effect that work upon the old terms would cease upon the 1st of January, 1881, the day when the act went into effect, as well as in view of the negotiations with them commenced in consequence of the system of intimidation inaugurated, to which the attention of the government ministers had already been called in Parliament, Mr. Benjamin Pickard, the secretary of the West Yorkshire Miners' Association, which included a large number of men over whom he had a strong influence, wrote to them an earnest letter, urging them upon no consideration whatever to consent to the proposed arrangement, declaring against the amount of litigation apprehended, referring to the manner in which the provisions of the Mines Regulation Act of 1872 were accepted, and avowing that while his constituents had not obtained all which they desired, "they certainly are not about to sell for a mess of pottage what they have got." In the same month of December Mr. A. Macdonald, M. P., a leader in the cause, also wrote strongly urging the miners of South Wales to refuse to enter into any such arrange-

ment; and Mr. William Crawford, secretary of the large association of Durham miners, says in his monthly circular for December: "The act of Parliament has been passed at the special request of the workmen, and for their special protection, and it ought to be allowed to fully operate, irrespective of any other consequences whatever. To contract out of the act by any system of insurance would be turning all the efforts put forth, and work done for many years, into a meaningless farce, and expose ourselves to the merited contempt of all right-thinking persons. One great difficulty which presents itself to the owners is the immense costs which will be incurred in the law courts. I have given the matter much thought, and I think that this difficulty can be easily obviated to the satisfaction of all parties. What we must obtain is the unquestioned right of the workmen to claim from owners compensation in case of accidents which might, or would, by an exercise of care and caution on the part of charge men, have been prevented. Any step which leads to a shifting of the personal responsibility of owners for the safety of the men from their own to the shoulders of insurance companies, is a step in the wrong direction."

These may be taken as types of the opinion almost universally prevalent at this time among miners and operatives.

In December (1880), the London and North Western Railway began negotiations with the men in their employ, numbering over fifty thousand; and a meeting of more than one thousand of them was held at Crewe to listen to a report from a deputation sent to the directors; who it appears had found the latter anxious to know whether their employees preferred to accept the act, or a revised scale of insurance. As illustrative of the sentiments which, at this time, seem generally to have prevailed, it may be noted that at this meeting the workmen interrupted the speakers, who were urging the acceptance of the suggestions of the directors, with cries of "Let's have the act!" and it was resolved at the close of the meeting to settle the question by a ballot.

During the next few days various other large meetings of the men, embracing many thousands of them, were held, one at Leicester, one at Wolverton, one at Liverpool, and another among the men employed in the company's mines at

Wigan. The proposal submitted to the men by the directors was as follows: To raise the scale of benefit for those in the first class, who paid 3d. a week, from £40 to £100 in case of death; from £35 to £100 in case of disablement; and from 18s. to 21s. per week in case of temporary disablement. For those in the second class, who pay 2d. a week, to raise the scale from £35 to £80 in case of death; from £25 to £80 in case of disablement; and from 12s. to 14s. per week in case of temporary disablement. And for those in the third class, who pay a penny a week, to raise the benefit from £12 10s. to £40 in case of death; from £18 15s. to £40 in case of disablement; and from 6s. to 7s. per week in case of temporary disablement.

In the collieries of the Earl of Dudley in South Staffordshire and East Worcestershire, the severe course adopted by him in discharging the surgeons hitherto permanently employed by him to attend to the men injured in his service, and in withdrawing all subscriptions for assistance, together with the sum which it had been his custom to allow for funeral expenses, at first had the effect of provoking the miners to refuse absolutely to sign releases; but an arrangement was afterwards effected. The first case carried to the Court of Queen's Bench was a suit against him in which damages to the amount of £184 were recovered. In this case the implied effect of the act of a workman in accepting his proposal, by returning to work, was tested.

The miners of Fife and Clackmannan, the colliers and iron-workers of Thorncliffe, Chapeltown, and many of the miners of South Yorkshire and North Derbyshire, declined to contract out of the act. Among the miners of West Lancashire, who had established a permanent relief society, which was in a prosperous condition, was assisting two hundred widows and three hundred children, and had an accumulated fund of £20,000, there was a difference of opinion as to the better course to follow, and a general disposition to accept the terms proposed. In Monmouthshire and South Wales, as well as in South Staffordshire, there was early manifested a like disposition, and permanent relief societies were founded in both districts.

As fair a proposal as any was made by the Great Western

Railway, which not only offered liberally to increase their subscriptions to the insurance fund, but also (which manifested a disposition not to take advantage of their men) to allow them, or their representatives in case of death, six weeks in which to elect whether to accept the provisions of the fund, or to rely upon the provisions of the act. The feeling of mutual confidence existing between the officers and employees of this company, and of the London and North Western, resulted in the acceptance of the proposals finally made.

Of 30,000 miners, members of the Lancashire and Cheshire Miners' Permanent Relief Society, 20,000 expressed their willingness to enter into an arrangement, 200 were unwilling, and 2,000 were willing to act with the majority. In some collieries in the Leigh and Wigan districts, and in Durham, strikes occurred; the men refused to contract out of the act, and passed resolutions requesting Mr. Macdonald to endeavor to have the act amended by making such a contract invalid. And in general about all that can be said is, that in some cases where fair and suitable proposals were made by the employers, they were accepted, while in others they were not.

It may be said that usually where large employers of labor did not succeed in securing releases, they resorted to the protection afforded by the accident insurance companies, who issued what are called "floating policies," assuming the risk of all damages which the person insured had been obliged to pay.

In speaking of the uncertainty which prevailed at the passing of the English act, as to its operation and the number of cases to which it would be applicable, Mr. F. G. P. Neison, a member of the London Statistical Society, in the discussion which followed the reading of Mr. Walford's paper "On the number of Deaths from Accidents, Negligence, etc., in the United Kingdom" (see *Journal of the London Statistical Society*, vol. XLIV., part iii., September, 1881), is reported as saying:—

"At that time a great number of employers were in deadly fear and tremor as to the responsibility which would be placed upon them by the passing of the act; and instructed him to inquire into the matter, to

ascertain what would be the practical operation of the bill; and for that purpose he had special facilities. Well, they naturally thought that if they took the question of mines first, they would undoubtedly be dealing with the most dangerous class of occupation in this country; and therefore the reports of the inspectors of mines for twenty years were carefully analyzed, and some large colliery accident funds supplied additional information. To sum up the matter, as far as mines were concerned, he might state that the result arrived at was that the rate of fatal accidents among miners might be safely put down at 23 per 10,000. It had been, some ten or fifteen years ago, as high as 36, but he was glad to notice that each year the rate had been reduced. They next proceeded to the subject of railways, and here he must say they were obliged to have recourse to returns other than those of the Board of Trade, which did not take in all the accidents that occurred. Well, the result of their investigations was this, that the rate of accidents was found to depend materially upon the nature of the traffic conducted upon the line. If they took a passenger line, like some of the lines south of London, they found that in the course of the year some 25 out of every 10,000 employees met with fatal accidents. But when they went to large goods traffic lines, like those north of the Thames, the rate ran up to 35; so that they were surprised to find that, while the accidents in mines were only 23 in 10,000, in railways, under the most favorable circumstances, the rate was 25. Since that inquiry he had had special facilities in connection with the large trades union in connection with the railways, and it was found that the facts arrived at were completely borne out by the experience of the union. They next proceeded to a branch of inquiry not mentioned there that evening. They investigated the returns of the navy for twenty years; and they found, although the rate of accidents in the navy had decreased very considerably in the last few years, taking an average of fifteen years, the rate of deaths from violence in that service was 40 in 10,000. In the mercantile marine the rate was astounding. They found there that instead of 40 the deaths were as high as 150. They found one very considerable element to account for this, and that was, that the deaths from shipwreck alone in the mercantile marine amounted to 80 in 10,000, which still left 70 due to causes other than shipwreck. Hitherto he had dealt with fatal accidents; but now, as far as non-fatal accidents were concerned, they found, taking the country as a whole, that about one-fifth of the men employed in and about mines met with an accident of greater or less intensity every year. In some mines they found the rate ran up to a half of those they employed. A significant fact in their inquiry was this, that they ascertained with regard to the north of England, that when the coal trade was bad, the rate of non-fatal accidents increased wonderfully, and men whose backs were sprained in times of depression, were never heard of in times of prosperity; but always, when the price of labor went down, the men got their backs sprained with greater intensity."

In considering these figures and the number of railway employees annually killed, which is about 25 in every 10,000

employed on passenger lines, and 36 in every 10,000 employed on lines doing both a passenger and freight business, it should not be forgotten that these figures do not represent the per cent of employees who can recover damages, because the defence of contributory negligence, as has been seen, greatly reduces this per cent. To increase to a considerable extent the workman's right to recover damages, will it not be necessary to lighten the severity of the rule of contributory negligence? From the estimates already given on page 94, it will be seen that in only a small per cent of cases of death or injury can damages be recovered. Mr. Moon, the chairman of the London and North Western Railway, in a statement to his employees, put the estimate as low as two per cent. To illustrate: This great railway employs over 50,000 men; and, if 23 in every 10,000 are annually killed, the number would amount to 115 persons, of which number six is about five per cent. If these six can each recover £450 as the maximum damages recoverable under the act, — which may be called, for the purpose of an estimate, three years' earnings, — the whole amount which for deaths can annually be collected of this railway company is £2,800, about \$14,000. If, as stated by Mr. Walford, 12,000 persons are annually killed by violence in Great Britain and Ireland, and, — as all are not killed in dangerous employments, — say two per cent can recover damages of £300 each, for three years' average earnings, the total amount which would probably be recoverable, under this act, for deaths throughout the United Kingdom, would be £72,000, about \$360,000. In Massachusetts there were 49 employees killed on the railroads in 1880, and 72 in 1881; and if, allowing for the dangerous nature of the employment, in five per cent of the cases damages are recoverable, there would have been less than three cases in 1880, and less than four cases in 1881, of deaths on the railroads for which damages could have been recovered. If \$5,000 could be recovered in each case, there would have been \$15,000 recoverable in 1880, and \$20,000 in 1881. And, in case there were three times as many serious injuries as deaths, — which is twice as liberal a proportion as the returns of the railroad companies and the reports of the railroad commissioners indicate, — there were nine

employees injured in 1880, and twelve in 1881, by whom damages were recoverable. If, on an average, \$5,000 was recoverable in each case, the amount of damages which could have been collected for all the injuries to employees on all the railroads of this Commonwealth, would have been \$45,000 for the year 1880, and \$60,000 for the year 1881.

CONSTRUCTION OF THE ENGLISH ACT.—DECISIONS UNDER IT.

Since this act^a went into operation, two years ago, several cases have been decided in the English courts, showing the effect of the act, the circumstances to which it is applicable, and the construction that should be put upon some of its various clauses.

The defence of common employment has not been abolished; and where the employee who causes and the employee who receives the injury are fellow-servants of the same grade, the liability of the master remains as before. Had it been intended to abolish this defence in all cases, it might have been done by a single sentence, without specifying in sub-sections the classes of cases to which it should be no longer applicable. In *Harrington v. Westthorp*,* it was held that a stevedore who, while stowing a cargo, was struck by a bale of goods, and injured through the negligence of another person engaged in manual labor, could not recover damages of their common employer. See also *Robins v. Cubitt*.† The act has made employers liable to workmen for the negligence of persons in authority over them, on the theory that the injury results from obedience to the orders of the employer or his agent; but it has not extended the liability to the acts of fellow-laborers of the same grade, not commissioned with authority over the person injured.

A husband is liable for the act of his wife, through whose negligence an injury is caused, because she is his agent, and her act is his act;‡ and a volunteer working without pay or reward is in no better position for recovering damages than a hired servant;§ a corporation is liable to its employees for the negligence of its manager or superintendent, who is their servant, and intrusted as their agent with

* L. T., March 11, 1882.

† 46 L. T. Rep. (N. S.) 535.

‡ *Miell v. English*, 15 L. T. 249.

§ *Degg v. Midland R'y Co.* 26 L. J. Ex. 171.

^a For full text see Appendix A.

their authority; and is also liable for the acts and resolutions of its directors, if within the scope of the authority vested in the corporation by its charter, because they are the acts and resolutions of the corporation itself,* and all the members of a partnership are liable to its servant for the negligence of one of the partners,† although they are not liable to one of their servants for the negligence of another servant of the same grade and without authority over the person injured. Under the partial definition of common employment as an employment where the person injured and the person doing the injury are at work to accomplish one and the same ultimate object, are at work for the same master, and derive their authority from the same source,‡ the master cannot be held liable for negligence except he was so liable before the act was passed, or has been made specifically liable by the first and second sections of the act. It is still a defence when not in the act specifically declared otherwise.

None of the duties which, before the act went into effect, the master owed to his servant, have been changed: the duty of exercising due care (1) whenever he personally superintends or engages in the work;§ (2) of exercising due care in the selection and employment of proper and competent servants, in order that each one of them may not be exposed to extraordinary risks by the negligence of unfit fellow-servants;|| (3) in providing and maintaining proper materials, tools, implements, machinery and plant,** which duty does not, however, amount to a warranty that they are absolutely fit for the purpose for which they are used, and free from all defects; (4) in carrying on his work or business under a safe and proper system of regulations;†† (5) in conforming to any statutory regulations which have been prescribed by the legislature, as regulations in relation to the erection of fire-escapes on factory buildings. But, while these duties remain the same, other addi-

* *Hough v. Railway Co.*, 100 U. S. 213-218.

† *Ashworth v. Stanwix*, 30 L. J. Q. B. 183.

‡ *Farwell v. B. & W. R. Co.* 4 Met. 49, cited in 3 Macq. 316.

§ *Roberts v. Smith*, 26 L. J. Ex. 319.

|| *Wilson v. Merry*, L. R. 1 Scotch App. 326-332.

** 3 Macq. 266, 288.

†† *Sword v. Cameron*, 1 D. 493; see 3 Macq. 266, 289.

tional duties have been imposed by the addition of other liabilities, and the increase of the number of remedies.

The act is designed to extend benefits to persons engaged in physical and manual labor, and affords no additional protection to persons engaged in intellectual pursuits, to persons who may be said to work with their heads, instead of their hands. The first section begins with these words: "Where, after the commencement of this act, personal injury is caused to a workman;" and workman is defined by the eighth section to mean "a railway servant and any person to whom the Employers' and Workmen's Act (1875) applies." By this act of 1875 the term "workman" "means any person who, being a laborer, servant in husbandry, journeyman, artificer, handicraftsman, miner, or otherwise engaged in manual labor, whether under the age of twenty-one or above that age, has entered into or works under a contract with an employer, whether the contract . . . be expressed or implied, oral or in writing, and be a contract of service or a contract personally to execute any work or labor;" but it does not include a domestic or menial servant. It is also enacted by section 13 that the term shall not include seamen or apprentices to the sea; and by section 12, that it shall apply only to an apprentice to the business of a workman, as that term has already been used, upon whose binding to apprenticeship no premium is paid in excess of £25; or to an apprentice who is bound under the provisions of the act which relates to the relief of the poor. It does not include workmen in the employ of the government, — workmen engaged in the royal dock-yards, — because an act does not apply to the crown without an express provision to that effect. The compensation awarded is not intended to be exemplary damages, nor an absolute remuneration for pecuniary loss, but what, under all the circumstances, is a reasonably fair compensation; and any sum recovered by suit, or accepted on agreement, is a bar to an action afterwards brought by the representatives of the person injured.

Various decisions have been made under the first and second sections, as to what are the circumstances under which the right to compensation exists; but it can never

exist where the injury is too remotely the result of the act, complained of. Upon this subject Baron Pollock, in *Rigby v. Hewitt*,* says: “Every person who does a wrong is at least responsible for all the mischievous consequences *that may reasonably be expected to result under ordinary circumstances from such misconduct.*” By the terms of the act, “the workman, or, in case the injury results in his death, the legal personal representatives of the workman, and any person entitled in case of death, shall have the same right of compensation and remedies against the employer as if the workman had not been a workman of nor in the service of the employer, nor engaged in his work.”

That the workman can contract out of the act is no longer doubtful, unless the House of Lords should reverse the decision of the Court of Queen’s Bench in the case of *Griffiths v. the Earl of Dudley*.†

Soon after the passage of the act, the attorney general and several leading solicitors expressed the opinion that there was no restriction upon the right of contract; and in consequence the Earl of Dudley, among other large employers of labor, notified the miners in his collieries on the first of January, 1881, the day the act went into operation, that they must, if they continued to work, waive the benefits of the act. “Conditions of employment,” so called, were circulated through the collieries, containing stipulations,—“that the persons employed at the colliery must be, and continue to be, during such employment, ordinary members of the colliery club or Permanent Relief Society, under its then present or any future name; that the employer should be, and continue to be, an honorary member of the society, and should subscribe thereto not less than theretofore; that, in consideration of such payment by the employer, and on being employed at the colliery, and as part of the terms of employment, every person so employed undertook for himself and his representatives, and any person entitled in case of his death, to look to the funds of the society alone under the rules and constitution thereof for compensation in case of injury sustained in such employment, whether resulting in death or not; and that neither the employer, nor any

* 5 Exch. 243.

† L. R. 9 Q. B. D. 357.

other person in his employment, whether a fellow-servant or not, should be liable in respect of any defect, negligence, act or omission under the Employers' Liability Act, 1880, or otherwise, or in respect of any negligence occasioning such injury; that the contract should remain in force and operate as a contract between the workman and the owner for the time being of the colliery, so long as the workmen continued to be employed at the colliery." This document was also posted in the hovels of the workmen, and in conspicuous places throughout the collieries.

Upon a suit brought in the Dudley County Court, and carried to the Queen's Bench, by the widow of one Griffiths, a workman killed in the pit-shaft through the negligence of an inspector of machinery, it was held by the Queen's Bench that such a contract was not against public policy; that the workman could and did contract himself out of the act, and could and did bind his widow and legal representatives by such a contract. The effect of the act was simply to negative the implication of an agreement by the workman in the contract of service, and in this way to render his contract not to claim compensation invalid; but the implication was overcome by an express contract of release.

Under the first sub-sections of the first and second sections which cover injuries caused "by reason of any defect in the condition of the ways, works, machinery or plant connected with or used in the service of the employer," if the defect "arose from or had not been discovered or remedied owing to the negligence (1) of the employer, or (2) of some person in the service of the employer, entrusted by him with the duty of seeing that the ways, works, machinery or plant were in proper condition," the term "ways" may be taken to mean the streets, lanes, passages or approaches leading to and connected with the employer's business or place of business. In *Etherington v. Harrison* (L. T. Dec. 31, 1881), and in *Huxam v. Thoms* (L. T. Jan. 28, 1882, Q. B. D.), it was decided that a plank "run" or "gang-way" leading from one building to another, and in *Moore v. Shaw* (L. T. Nov. 20, 1882, Q. B. D.) that a scaffold erected for the use of workmen in building a church, was a "way;" but it had before been held not to apply to a tramway which rests upon the soil without being

affixed to it.* “Plant” is a general term, used more especially in England, and includes tools, implements, machinery, rolling-stock, fixtures, apparatus, or appliances ordinarily used in carrying on any trade, manufacture, or business.† These clauses do *not* impose an obligation of absolute *warranty* or *insurance* against defects. In *Langham v. Young*,‡ decided in the Westminster County Court, it was held that they did not impose a warranty against *latent defects*, which decision was affirmed in *Whittaker v. Balmforth*,§ although in this case the employer was held liable for his foreman’s negligence in selecting an eye-bolt. Neither do they impose a warranty that the machinery is as *safe as possible* against accidents, and adapted to prevent every *possible* carelessness.||

The second sub-section applies to “the negligence of any person in the service of the employer who has any superintendence intrusted to him, whilst in the exercise of such superintendence.” The meaning of the words, “in the service of the employer” depends upon the relations existing between the master and servant, the characteristics of which relationship are (1) a hiring, together with the several rights of (2) direction, and control, and (3) dismissal (4) upon payment of wages.** The injury must have occurred during the exercise of this superintendency, although in point of time it may have happened after the superintendency had ceased.††

The third sub-section applies to the negligence “of any person in the service of the employer to whose orders or directions the workman at the time of the injury was bound to conform, and did conform, where such injury resulted from his having so conformed.” An “order” has been called negligent when the acts which, in discharge of the order, it is reasonably necessary for the workman to do, involve extraordinary risk; as, for instance, to use a hand crane for the purpose of moving a wheelbarrow of sand, when the sand

* *Beanfort (Duke of) v. Bates*, 3 D. F. J. 381, s. c. 31 L. J. Ch. 481.

† See Wharton’s Law Lexicon.

‡ Law Times, July 30, 1881.

§ Law Times, Sept. 10, 1881.

|| *Robins v. Cubitt*, L. T. R. (N. S.) 535 s. c. L. R. Q. B. D.

** *McGinn v. Pilling*, L. T. Dec. 31, 1881.

†† *Owen v. Mandslay*, L. T. Nov. 19, 1881; Q. B. D. Feb. 18, 1882.

might instead have been carried by spadefuls.* But if there is no negligence attributable to the workman who gave the order, and the accident occurred without negligence on the part of any one, the master will not be liable; and where a workman was assisting, under the direction of the foreman, in raising a steam engine, and when it had been raised several inches, the foreman let go for the purpose of putting a brick under it, thereby causing the engine to fall and crush the workman's fingers, it was held that the "order" was not negligent.†

The fourth sub-section of section 1, and the second sub-section of section 2, relate to an act or omission "done or made in obedience to (1) the rules or by-laws, or in obedience (2) to particular instructions given to any person delegated with the authority of the employer in that behalf," provided "the injury resulted from some impropriety or defect in the rules, by-laws or instructions therein mentioned." These clauses amount to an absolute warranty that the rules and by-laws shall be free from "improprieties" and "defects," and make the employer responsible for the injury caused by the act of any workman of any grade which results from his execution of such an order. An "impropriety" in a rule may be defined to be an unfitness in the method prescribed to accomplish the purpose intended, — unfitness either in the manner in which the purpose shall be accomplished, in the time or place at which it shall be done, or the circumstances which shall attend its accomplishment; and "defect" may be defined to include any neglect or omission in the rule to provide for the accomplishment of the purpose intended. There is nothing in the act which makes it necessary that the rule should be in writing, although the term "by-laws" may have been intended to mean a written rule. The further provision allowing a rule or by-law, which has been approved or accepted by certain public officers, to be considered free from improprieties or defects, is similar to provisions in the Petroleum Act of 1871, the Mines Regulation Act of 1872, the Explosives Act of 1875, and the Alkali Act of 1881.

* *Laming v. Webb*, L. T. Feb. 4, 1882.

† *McManus v. Hay*, 19 S. L. R. 345.

Sub-section five, which relates to "the negligence of any person in the service of the employer, who has the charge or control of any signal, points, locomotive engine, or train upon a railway," extends to railway companies a wider liability than is imposed upon other employers, because of the peculiarly dangerous risk attending this employment, upon the safe conduct of which the security of travellers so much depends, and because of the unusual difficulty of making it sure that railroads may not escape liability through the variety of dissimilar occupations in this employment. The framers of the act found this section, not included in the original bill, absolutely essential to the accomplishment of their purposes; and it is quite likely that this is the only section of any special value to the persons intended to be benefitted. The terms "charge or control" are important words in the clause; and in *Haysler v. Great Western Railway Co.** the question as to the extent of their meaning was raised, and they were given, for the purposes of the case, a construction sufficiently broad to allow two persons at the same time to be in charge and control of an engine.

The same words were also under consideration in *Cox v. The Great Western Railway Co.*,† where a "capstan-man" in the employ of the company, engaged in propelling a series of trucks along a line of rails for the conveyance of goods and freight, injured a fellow-employee engaged at the time in a similar occupation at the other end of the line, and about one hundred yards off. The motion was given to the trucks from a capstan moved by hydraulic power from a stationary engine. The questions of fact were allowed by the court to be left to the jury, — (1) whether the "capstan-man" had the charge or control of a train upon a railway, and (2) whether he was negligent; and both were answered in the affirmative. This case also decides that a series of trucks (twelve trucks in this case), laden with goods instead of passengers, constitutes a "train upon a railway;" and perhaps the further question that the act applies to stationary or traction engines.

Under section 7, which provides that "a notice in re-

* L. T. Dec. 17, 1881; Q. B. D. Dec. 10, 1881.

† L. R. 9, Q. B. D. 106.

spect of an injury under this act shall give the name and address of the person injured, and shall state in ordinary language the cause of the injury, and the date at which it was sustained," it was held in *Stone v. Hyde*,* that the notice shall not be expressed in technical language with the particularity of a statement of claim; that a statement, in ordinary language, of the name and address of the person injured, with the cause and date of the injury, was sufficient. This notice, it is apparent from the context, must be in writing; a verbal notice cannot be served on the defendant, as the section further prescribes.† It need not be given by the person injured, but may be given by his solicitor, or perhaps by any person, in behalf of the workman, who has knowledge or information of the injury; and it is thought that it may even be contained in more than one letter or document.‡ And by the same section it is also provided that any defect or inaccuracy shall not render the notice invalid, unless the defence is prejudiced thereby, or there was an intention to mislead.‡

The defence of contributory negligence remains unchanged by the act. In the original bill it was provided, at the end of the first section, "that this section shall not apply where the workman injured materially contributed by his own negligence to the cause of his injury." This clause would have mitigated somewhat the severity of the rule of contributory negligence, the application of which prevented the person injured, in ninety-five cases out of a hundred, as has been seen, from recovering damages, by allowing him to recover damages where his negligence had not contributed materially to the injury. But in the process of revising the bill, under the supervision of able counsel, in order to make it conform more completely to the interests of employers, this clause was stricken out, and thus the work was finished of making the bill what may now, with propriety, be called a sham reform.

The term "contributory negligence," which is used to designate this doctrine, is likely to mislead, because it seems

* 46 L. T. R. (N. S.) 421.

† *Moyle v. Jenkins*, L. T. Dec. 16, 1881; 51 L. J. Q. B. 112.

‡ *Keene v. Millwall Dock Company*, 46 L. T. R. (N. S.) 472.

to indicate that the person injured cannot recover where he, by his negligence, consented or contributed to the injury. But when more carefully expressed in ordinary language, the rule is that the person injured cannot recover damages, when, however negligent the other party might have been, the injury might have been prevented by the exercise of ordinary care on his part, — of such care as a reasonably prudent man of ordinary intelligence would have exercised under like circumstances. It may be true that the negligence of the other was of the grossest kind; but, when it is equally true that the injury might have been prevented by the exercise of ordinary care, the law says that the negligence of the other would have done no injury without the negligence of the person injured; and says, furthermore, that the burden of proof shall rest upon the latter; and, because he is the plaintiff, he shall show by a reasonable preponderance of evidence, that he was in the exercise of ordinary care, and the injury is in no degree attributable to the want, on his part, of such care.* If a railway train should pass a station without giving warning of its approach by whistling, and a person crossing the track without looking for the approach of a train should be injured, he would be guilty of contributory negligence.† If the proprietor of a colliery should for weeks allow a statutory special rule, requiring the hoisting ropes to be examined every day, to be disregarded, and in consequence of this violation a workman should be injured who himself neglected upon this notice to examine the rope after a fire had occurred in the mine, he would be guilty of contributory negligence.‡

In the application of this rule its hardship becomes more manifest because it is applied by jurors, in the calmness of a court room, upon evidence submitted after the act has resulted in an injury, and argued upon by counsel able to point out some way in which the injury might possibly have been avoided. While the doctrine of contributory negligence in all its severity remains unchanged,§ another clause

* *The Margaret*, L. R. 6, P. D. 76; *Horton v. Ipswich*, 12 Cush. 488.

† *Slattery v. D. W. & W. R. Co.* 3 App. cases 1155.

‡ *Senior v. Ward*, 28 L. J., Q. B. 139.

§ See *Pitman v. Bennett*, L. T., February 25, 1882.

of the act defines a failure to give notice of a known defect or neglect to be such an omission as is equivalent to contributory negligence. Sub-section three of section 2 says, "No right to compensation shall exist in any case where the workman knew of the defect or negligence which caused his injury, and failed within a reasonable time to give, or cause to be given, information thereof to the employer, or some person superior to himself in the service of the employer, unless he was aware that the employer or such superior already knew of the said defect or negligence." This, without doubt, places upon the person suing an obligation to give notice of any defect known to him, and to prove at the trial that he has not violated that obligation. The information must relate to the defect which caused the injury; and, when the notice has been given to the employer or any superior servant, the workman cannot be accused of contributory negligence. Should he, however, continue in the service, and receive injury from this defect or any other neglect complained of, there is nothing in the act to prevent the use of the defence that he thereby consented to take the risk of the defect or neglect.

Attention has already been called to the fact that only partially has the defence of common employment been abolished, and that little more has been done in this direction than to make the employer liable for the negligence of a person entrusted with superintendency or with superior authority. "At the time of the passing of the act, the law stood thus," says Mr. Justice Field, in the case of *Griffiths v. the Earl of Dudley* :* "It was an implied term of the contract between employer and workman, that the latter should not recover damages if he was injured by the negligence of a person in the common employment." And if, he continues, the effect of section 1 is to do away with this implied term, the contract of service, upon which both rely, is likewise done away with, and there is no contract left by virtue of which any right of action exists; and, moreover, the workman becomes a trespasser upon the employer's premises. The cases of *Priestly v. Fowler*,† of *Farwell v. the Boston & Worcester Railroad*,‡ and of *the Bartonshill*

* L. R. 9 Q. B. D. 357, 363.

† 3 M. & W. 1.

‡ 4 Met. 49.

Coal Co. v. Reid,* already cited several times, established this doctrine of implied contract, and the common employment incident thereto, which was carried so far in *Wilson v. Merry* as to excuse an employer from all liability for the negligence of his foreman or superintendent. And the act seems only to have gone so far as to change the rule of *Wilson v. Merry*, and leave the principle of implied contract and common employment as it was laid down in these earlier cases.

No consideration of the operation of the act would be of much value which failed to mention the relief afforded the employers by the aid of insurance. Two courses were open to them; either, first, to make their contributions to the insurance and protective funds large enough to induce their workmen to contract out of the act; or, second, to submit to its terms, and, by obtaining floating policies in accident insurance companies, to make the burden as light as possible. It was soon found that by the payment of almost nominal rates, general floating policies could be obtained; and that those employers who did not succeed upon payment of small contributions to the funds in avoiding the provisions of the act, might safely submit with little fear of the ruin and bankruptcy so foolishly apprehended. The lamentable ignorance which prevailed two or three years ago, as to the amount of damages recoverable, was dispelled only when some persons, first among whom were the accident insurance companies, made a careful collection of the facts and statistics in relation to violent deaths and injuries, and therefrom estimated the proportion of deaths and injuries probably resulting from contributory negligence. When it was found how very small a proportion was left, for which in each case the maximum rate of damages was only about £225, the employers must have laughed at the obstacles which they found existed only in their imagination, and the friends of the reform must have felt that they had gained a hollow victory. For even this slight liability the employer has a remedy, sometimes perhaps of little value, against the person by whose negligence he has been compelled to pay damages to his workman; and even when this liability has

* 3 Macq. 266, 283.

been assumed for him by some accident insurance company, the latter, upon payment of the loss, has, by what is called the right of subrogation, the privilege of prosecuting the remedy in his name.

DECISIONS IN COUNTY COURTS UNDER THE ENGLISH ACT.

The county courts have, under section 6, original jurisdiction of all actions under the act, subject to removal to a superior court, in like manner and upon the same conditions as other actions begun in the county courts. While the decisions of these courts are not of like character with those of the higher courts, some of them at least are worthy of grave consideration, as they are rendered by lawyers of the rank of Queen's counsel, appointed to try questions of fact with the aid of a jury. All the decisions under the act of the higher courts have, it is believed, been referred to, and, unless some oversight has occurred, all the decisions of the county courts made between November, 1881, when the act may be said to have been fairly in operation, and the present time (December, 1882), have been digested here. In the absence of opinions by judges of appellate courts, they are of peculiar importance, as the only judicial construction placed upon the act.

Ways, Works, etc.—*Topham v. Goodwin*, Law Times, Nov. 5, 1881; section 2, sub-section 1, and section 2, sub-section 3.

The question was, whether a certain form of machinery (viz., a loose pulley or some other proper means of throwing a saw out of gear) rendered it defective within the meaning of this section. The court decided in favor of the defendant.

Etherington v. Harrison, L. T., Dec. 31, 1881, section 1, was decided by the jury in favor of the plaintiff on a question of fact, whether a loose plank in a scaffolding was such a defect in the "ways and works" used by the defendant in his business as to make him responsible, upon its being brought to his notice, for an injury sustained through the plank falling down upon the plaintiff.

Huxam v. Thoms, L. T., Q. B. D., Jan. 28, 1882, section 1. A scaffold is part of the ways and works. The

plaintiff fell off the scaffold. It was held that there was evidence on the part of defendant, sufficient to make him liable under section 1.

Smith v. Lafons, L. T., July 22, section 1, sub-section 1. The plaintiff, in the course of employment, was standing on a bridge owned by the defendant, which overtopped a public road, and while there standing was knocked over by a team attempting to pass underneath it, causing the injury for which he sued. The driver of the team was ordered to go ahead by a policeman in the employ of the defendant. It appeared also that the bridge was insecurely fastened to the walls on either side. The defendant was held liable, under section 1, sub-section 1, for a defect in ways, works, etc.

Batchelor v. Tilbury, et al., L. T., Aug. 12, 1882, section 1, sub-section 1. Plaintiff was a "bricklayer's laborer." Defendants were in partnership as builders. Plaintiff sued for injuries caused, while in their employ, by the "fall of a scaffold placed on joists supported on a quartering sustained by 'corbels.'" The corbels in this case were flat iron plates, "without any turn-up at the ends or sides," and used for the purpose of insertion in the wall. The wall which was being built was a party wall between two houses. One of the corbels had to be removed, as it crossed a chimney or flue; and it was owing to the careless manner in which this corbel was reset by one of the bricklayers, that the scaffolding fell and injured the plaintiff. It was held that "scaffolding was no doubt part of the works in building; and the works should be sufficiently supported and firm while in use, to insure safety to the workmen employed in the work, that they might go about their work with a free mind and ready will;" and judgment was accordingly given for the plaintiff, who was held to have exercised due care under the circumstances.

Franks v. the India Rubber, etc., Co., L. T., Oct. 7, 1882, section 2, sub-section 1. The plaintiff, while engaged in operating a cutting-machine, was standing on some loose planks, which, slipping from under him, threw him on to the machine, and caused the injury for which he sued. It was held that this was not a defect in the "plant" within the meaning of the act, and, even if it were, that the defendants could not have been held liable, as it was not shown

that the defect had arisen "or had not been discovered" through his negligence or that of his superintendent.

Notice (defective), Service, etc. — *Moyle v. Jenkins*, L. T., Dec. 16, 1881. This case involved the question of giving notice. It was decided that it must be in writing, all the judges intimating, however, that perhaps the act might be improved by amendment in that respect.

Adams v. Nightingale, L. T., Dec. 24, 1881, sections 4 and 7. It was held that "notice of injury, left after business hours, under certain circumstances was insufficient." In this case, one copy of the notice was left at a late hour in the afternoon (five minutes to six) with a little boy from five to seven years old, son of the foreman; while another was left at the same hour in a little wooden house belonging to the foreman, where he paid off his laborers. Still a third was left with a laborer on the premises at 5.30 o'clock.

The same case was decided in the Queen's Bench, April 15, 1882. It was held, in this court, that "a notice under the act must be served in such a manner that it is reasonable to expect that it will come to the defendant's knowledge in the ordinary course of business;" and further, that "the defendant's knowledge of the injury suffered by the plaintiff, within six weeks, did not cure any informality with regard to the notice."

Hunter v. Dickinson, L. T., March 25, 1882. This was a case of defective notice. The court, in commenting upon the latter part of the seventh section, is reported as saying that an error inadvertently made in giving notice, as a wrong date, etc., might be amended; but, where there was no statement at all of how the injury happened, except the words "in consequence of certain defective arrangements," it could not be said that any notice had been given.

Macey v. Hodson et al., L. T., Dec. 24, 1881. This case involved the question of waiver of notice. It was held that the fact that one of the defendants promised on three separate occasions to compensate the plaintiff, was not "'a reasonable excuse' for the want of notice."

Franks v. Silver & Co., L. T., May 27, 1882, section 4, County Court rules, 1880, rule 3. This is the same case as

Franks v. India Rubber Co. (*ante*, p. 132). It was held that, where a notice under section 4 merely stated that the injury was caused "in consequence of being directed to stand upon a loose board in running water," and the bill of particulars, required by the county court rules (rule 3) to be attached to the summons, stated that it was the result of a "defect in the condition of the ways, works, machinery or plant connected with or used in the business of the employers," the plaintiff had not fulfilled the requirements of the act.

Who is a Contractor? — *McGinn v. Pilling & Co., L. T.*, Dec. 31, 1881, sections 1, 2, and 8, and sub-sections thereof. Where the plaintiff was injured by the negligence of a sub-contractor, in whose employ he was at the time, it was held that, under a strict construction of the word "employer," as contained in the sub-sections of section 1, the defendants were not liable, as the plaintiff was not employed by them. In this case all the materials for the work were furnished by the defendants, and the sub-contractor who hired the plaintiff was a man of no substance, having, it appears, just come out of the workhouse.

Harrison v. Dawson, L. T., Oct. 14, 1882, section 8. "The plaintiff was employed by the defendant to take a barge" to a dock and unload it. "In pushing the barge from its moorings," he "stepped on a carling or beam" used to support some boards, some of which proved to be rotten, and others had been taken away. The "carling" went from under him, and he was precipitated into the hold, breaking his leg by the fall. The plaintiff received a stipulated amount for his services, having the liberty to employ help if he saw fit. He did, as a matter of fact, employ others. It was held that, under these circumstances, a "lighter man" was a contractor, "and not a workman, within the act."

Negligent Order. — *Haysler v. the Great Western Railway Company, L. T.*, Dec. 17, 1881, section 1. The plaintiff, while in the course of his employment of tending an engine, was injured through the negligence of an engineer or fireman in the employ of the company. The court declined to express an opinion as to who was "in charge" of the engine, but

decided that there was evidence sufficient, on the whole, to give judgment for plaintiff, and accordingly decided in his favor.

Hatfield v. Enthoven, L. T., Dec. 31, 1881, section 1, sub-section 1. (Discretion allowed workmen in obeying a negligent order.) This case involved a question of "some nicety" as to whether it was within the scope of employment to perform a certain act (*viz.*, removing a crane) which caused an injury to plaintiff, and which it was necessary for him to perform before he could obey orders. The court, "although with some doubt" as to the fact in this particular case, decided in favor of the plaintiff.

Laming v. Webb, L. T., Feb. 4, 1882, section 1. Held, that it was evidence of negligence, sufficient to create liability, to order a minor to alter some machinery while it was in motion.

In *Smith v. Lafons*, before quoted, the defendant was held liable, under section 1, sub-section 2, "with some doubt," for the negligence of one entrusted with superintendence.

Harrington v. Westhorp, L. T., March 11, 1882, section 1, sub-section 3. An employer is not liable for negligence of manual laborer. Admitting that the defendants were negligent in this case, contrary to the finding of the jury, still *semble* the defendants would not be liable, as the act which is alleged to have caused the injury was done by one who was only temporarily acting as foreman, "but whose usual duties were those of manual labor."

Boatwright v. Downing, L. T., Aug. 15, 1882, section 1, sub-sections 2 and 3. A person engaged in manual labor is not a superior workman. A person ordinarily engaged in manual labor, whose order, as to how a pole should be used in raising a beam, the person injured obeys, is not a superior workman or a superintendent under sub-sections 2 and 3 of section 1. The plaintiff was directed by the foreman of the defendant to obey the orders of E, an under foreman; E directed him to assist two manual laborers in raising a beam by the aid of a pole. The injury was caused by the unskillfulness and want of proper judgment of plaintiff and E in putting up the pole. As E was an ordinary foreman, and usually engaged in manual labor, it was held that he was not

a person for whose acts the employer was liable, as one intrusted with superintendence, or as a superior workman, under sub-sections 2 and 3 of section 1. This case is not quite so strong as *Harrington v. Westhorp* (*ante*, p. 135), because here the person who caused the injury was not only ordinarily engaged in manual labor, but also had no authority whatsoever to superintend the particular work in question.

Owens v. Maudsley & Co., L. T., Nov. 19, 1881, section 1. This case turned on the question whether the under foreman of the company was negligent. The jury found that there was negligence in not turning a boiler-plate in such a manner as to make it safe to remove a boiler, and held the company liable. The appeal to the Queen's Bench was afterwards dismissed, and the judgment sustained.

Trivett v. Midland Railway Company, L. T., June 3, 1882, section 1, sub-sections 2 and 3. The plaintiff, while at work on one of the company's engines under the orders of a foreman, was injured through the negligence of a superintendent in giving an order for reversing the engine without previously warning the plaintiff, according to the rule of the company, whereby the plaintiff was injured.

Clowes v. the Atlantic Patent Fuel Company, L. T., Oct. 28, 1882, section 1, sub-section 5. The plaintiff was employed by the defendant as "handy" man, his duties being simply to obey orders. While obeying the orders of a foreman, or superior workman in the employ of the company, who directed him to sand the rails so as to give the engine a better start, the engine was suddenly set in motion, without any warning, as was the custom in such cases, and caused the injury for which this suit was brought. The court held that the company was liable for the negligence of its driver in starting the engine without warning, under section 1, sub-section 5, which makes the master liable for the negligence of a workman in the management of a locomotive.

Contributory Negligence. — *Pitman v. Bennett, L. T.*, Feb. 25, 1882. It was held that contributory negligence was a defence, except where the employer or his superintendent have notice of a defect within the meaning of the third exception in section 2, which obliges a workman to give

notice to his employer, or some superior person, of the defect, if known to him, which caused the injury.

Warren *v.* Bates, L. T., Oct. 14, 1882, section 1, sub-section 1, and section 2, sub-section 1. "The plaintiff, being in charge of an engine and boiler at the defendant's mill, improperly placed heavy weights upon the safety-valve; and, although he was aware that the gauge-glass was out of order, owing to there being a quantity of mud in the boiler, failed to try the test-taps attached to the boiler for the purpose of ascertaining the amount of water in it. The plaintiff having been injured by the boiler exploding: Held, that the above facts constituted contributory negligence on the part of the plaintiff, and that he was therefore not entitled to recover, under section 1, sub-section 1, and section 2, sub-section 1, notwithstanding that the boiler was in a defective condition from want of cleaning, owing to the negligence of the defendant's foreman."

In Topham *v.* Goodwin, above cited, the question whether there was any contributory negligence on the part of the plaintiff (a minor), in handling machinery while it was in motion, was decided in favor of the defendant.

Actual Employment necessary. — Lovell *v.* Charrington, L. T., March, 1882. It was held that the act did not apply in this case, as it was proved, as matter of fact, that the plaintiff was not in the employ of the defendant at the time the injury occurred.

Employee's Right to Contract himself out of the Act; Widow and Legal Representatives deprived of any Claim for Damages. — Griffiths *v.* Lord Dudley, L. T., June 3, 1882, Q. B. D. It was held that, even if the employee could contract himself out of the act, "yet he could not contract to deprive his widow or other personal representative of the benefit of that statute." (On a rule *nisi* granted to show cause, etc., this decision was afterwards over-ruled, the court holding that under such a contract his legal representatives would be cut off from all right of action.)

What is Plant? — *Banks v. Murrell*, L. T., June 17, 1882, section 1, sub-section 1. The plaintiff, while at work filling coal bins for the defendant, was injured through the giving way of a defective partition in one of the bins. It was held that this was a defect in the “plant,” for which the company were liable under sub-section 1 of section 1, which makes them responsible without being notified of any defect.

Compensation. — Amount of compensation for injuries to be recovered by an “army reserve pensioner.”

Bolton v. Midland Railway Company, L. T., July 8, 1882, section 3. The plaintiff, who was on the “reserve list,” and entitled to a pension of sixpence per day, sued the company for extra compensation on account of the loss of his pension through injuries sustained by the negligence of a superior workman in the company’s employ. It was held that he was entitled to damages under section 3, allowing a sum not exceeding the estimated earnings of three years; but it does not appear distinctly whether the loss of his pension should be included in the compensation awarded.

DISCUSSION OF THE SUBJECT IN THIS COUNTRY.

This subject has for years attracted the attention of lawyers, who in their professional practice have abundant opportunity of seeing the hardship and misery caused by the unjust distinction made between the liability of employers to third persons and to their employees. It is of frequent occurrence to hear or read of an instance where a corporation which is answerable for an injury to one of its workmen at the bar of conscience and of public opinion, is released from liability at the bar of what is called justice. A single instance will illustrate the hardship of the rule. An Italian, just landed in this country, ignorant of its language and its people, was hired to shovel gravel on one of our railroads by a sub-contractor of the company. He worked at loading and unloading a gravel train with a gang of men, two of whom were assigned to each car. He worked, with another laborer, on the last car. The train had been loaded, and was backing down, over a temporary, poorly-laid track, to be unloaded, which was done by dump-

ing or upsetting the car. The train had backed down, and had stopped, as he supposed, at the place where his car was to be dumped; and he, with the others, had got up from the gravel where they had been sitting, when the engineer gave the train a sudden jerk forward, in order to get headway for the purpose of backing still further. The Italian was thrown off backwards under the wheels, run over, and seriously injured. Upon a suit for damages, it was proved at the trial that, although the railroad company owned the engine, and the engineer who caused the injury was in their employ, the engine, and with it the engineer, was let to the sub-contractor, to work under his direction and control; and therefore, under the rule of common employment, the engineer and the Italian were fellow-employees for the sub-contractor. The poor fellow, who could recover no damages, had no money, was unable to work, was a cripple for life, and shortly afterwards became an inmate of one of the State almshouses.

It may be said that he ought to have sat still on the top of the gravel until the train had finally stopped; and that by getting up he was guilty of contributory negligence. But this was a fact for the jury to pass upon, which they were prevented from considering by the application of the rule of common employment. It may be said that, admitting the engineer to have been careless, while the laborer was not, the company ought not to be held responsible for his carelessness, because it had done its best to employ a competent man. But, even if it had done its best, the law, whether justly or unjustly, has for centuries made every company, every partnership, corporation, or individual, responsible for contributory negligence to every other person who is thereby injured, except to its own employee. Why should the law make an exception in the case of an employee?

This question has been often asked by lawyers and others, and the conventional answer given is, that the employee agrees to take the risk of the employment, and is paid for taking it. That he is paid for taking the risk is proved to be a mistake by a comparison of the rate of wages paid employees in dangerous employments with the wages paid

men of like capacity in other employments. On the other hand, that he agrees to take the risk is proved by saying that the courts have made for him an implied contract to this effect. To which it is answered that the laborer, while denying that the courts ever had a right to make for him such a contract, denies further their right to imply such a contract any longer, in the face of his express denial that he agrees or will submit to such a contract. No court can imply a contract contrary to the express desire of one of the persons made a party to it. While there may have been among lawyers and others a difference of opinion as to the justice in all cases, or wisdom, of a general change of the law, the hardship of compelling the workman to endure in silence an injury caused by another workman acting in strict obedience to the authority conferred upon him by their employer, has generally been recognized, although of late but little discussed in the courts, because the rule of common employment has become so strongly established as to make exception to it of no avail. When, however, in consequence of the terrible explosions occurring in English, Welsh, and Scottish coal mines, by which scores of miners were killed at a time, public attention in England was called to the poverty and misery resulting in part from what many thought a gross defect in the law; and when, also, after years of agitation, Parliament had passed the Employers' Liability Act, it began to be thought possible in this country to effect a reversal of the common law.

Within the past few years this subject has been before the legislatures of several of the States, which, as has been seen, have passed laws making employers liable for injuries in certain cases, although no such general change has been made as that by the English Parliament. During the past two years the subject has been before the legislatures of several States, New York and Connecticut among others, which have as yet made no change. Two years ago it was brought before the legislature of Massachusetts by a petition signed by Wendell Phillips, Benjamin F. Butler, Delano A. Goddard, Edwin B. Haskell, and editors of several other leading newspapers published in the State, and other prominent citizens; but, upon reference to the judiciary committee,

and a hearing thereon, the petition was opposed by counsel for all the railroads running into Boston, and defeated. Last year the subject was renewed, and, upon hearing, on the recommendation of the committee, was referred by a resolution of the legislature to the Bureau of Statistics of Labor for consideration.

SUMMARY OF REASONS AND OBJECTIONS.

In closing the discussion of this subject, it may be well, even at the risk sometimes of repetition, to give a summary of some of the objections to and the reasons in favor of a change in the law. One of the most frequent objections against compelling the employer to compensate his employee for the negligence of a fellow-workman is, that he ought not to be obliged to answer for the acts of another, when he is himself without fault. To which objection the answer is made, that when the employer, by the employment of another whom he vests with a general authority to act in his stead, chooses to part with his own authority, and trust to the judgment and discretion of some one else, he ought to abide the consequences, whether good or bad. When the employee does well, he reaps the profits; when the employee does ill, he ought to suffer the losses; and public policy requires that, as some one must bear the burden of the risk, it should rest upon the shoulders of the person who employs, pays and controls the workman. And, moreover, as the law has for centuries imposed upon the employer a similar obligation towards all other persons, making him answerable to the world in general for the negligence of his servants, such an exception to a general principle of liability ought not to exist without some special reason therefor. If it is a hardship to be obliged to pay for the wrong-doing of a servant whenever the act is not a wilful act, it is a hardship which the wisdom of our ancestors imposed, and which has not been removed by the wisdom of later times.

Another objection, often urged, is that the employee enters into the contract of employment with full knowledge of the dangers, with the risk computed in his wages. As to the first part of this objection it may be asked whether, unless the employment is of a very dangerous nature, the risk of injury is often considered at the time the contract is

made, or any thought taken as to where the responsibility for damages would rest. And, as no such risk is assumed, on a railroad for instance, by the traveller when he buys his ticket, while, on the contrary, the company is made by law responsible for the competency of its servants and the safety of the journey, it is natural to ask why a different rule should be made to apply to a brakeman or conductor. Whether the danger of injury is computed in the wages, is a question of fact dependent upon a knowledge of the wages paid to workmen of like capacity in less dangerous employments, which it is evident could be obtained only after a careful investigation of the manifold causes which determine the rate of wages. If, however, only a casual inquiry were made as to the wages paid to laborers of the same grade in other employments, it would be found that the workman is paid for the labor performed, with no compensation whatever for the risk of injury.

But the present state of the law, it is said, rests upon a contract of service implied by the courts; because, when the rule was adopted, the judges thought that public policy required an agreement of non-liability, rather than one of liability. But is not this rather a question of political economy than one to be passed upon by the courts? And is it not possible that what was thought a wise public policy for the State to adopt a half-century ago, when manufactures and railroads were in their infancy, ought to be changed by the legislature, now that the consolidation of capital in great monopolies has become an object of apprehension? In order to foster these commercial enterprises, is it any longer necessary to exact so heavy a contribution from the laboring class, and impose the burden of so severe a protective system upon our own instead of foreign laborers? While the judges who made this law may have been wise in their generation, is it not probable that the wisdom of time and experience may think that public policy requires a change in the law?

Again, it is urged that the employee ought to be left to his remedy against the fellow-employee who caused his injury. Hardly any one would be so simple as to consider this remedy of any practical value, because, unfortunately, most workmen are not able to pay a judgment for damages,

or even a bill of costs. Besides, until within a year, — until the case of *Osborne v. Morgan* * overruled the case of *Albro v. Jaquith*, † decided in 1855, it has been impossible for such a judgment to be obtained. Neither does it seem altogether right to compel an employee, acting in good faith, using his best judgment, as the agent of some one else known to be his principal, to pay for the consequences of doing as he was generally authorized. But, waiving this for the sake of the argument, the law gives the employer a like remedy, by allowing him to recover of the negligent employee any damages he has been obliged to pay as a consequence of his negligence. ‡

In view of this condition of the law, the question may with some pertinency be asked, Why should not the employer be left to his remedy against his employee for reimbursement?

That the dictates of humanity, as well as the promptings of self-interest, stimulate employers of labor to do a great deal towards protecting the lives and limbs of their workmen, there is no doubt. That they would not intentionally allow any neglect in the selection of workmen, of the materials used in the machinery worked, is equally certain. But, notwithstanding all this, there are doubtless many accidents and injuries occurring daily, which, with a little more precaution in the particulars mentioned, might have been prevented. Workmen generally are not in a position to say with whom they will work, or what materials or machinery shall be used; and, if greater precautions are to be taken, they must be provided for by employers. If the ordinary dictates of humanity and self-interest are not sufficient to make life more secure, ought not their interest in the welfare of their workmen to be increased by imposing a heavier pecuniary responsibility? Where an appeal to the generous impulses of the heart is not a sufficient protection, should not an appeal be made to the more subtle instincts of the pocket?

And in this connection it may perhaps be well to allude to the argument that a heavier responsibility is already imposed by requiring the employer to use due care in

* 130 M. 102.

† 4 Gray, 99.

‡ *White v. Phillipston*, 10 Met. 111; also 1 Allen, 102.

selecting and maintaining the tools, implements, stock, materials, and plant used by his workmen. Upon consideration, this, however, will seem to be an insufficient safeguard, because its value has been frittered away by the decisions of the courts, which declare that there is no liability unless the defect complained of was unknown to the person injured, while it was known to the employer, but not communicated. The employer is not liable unless he knew of the defect and declined to communicate it; or, in other words, he is not liable for his ignorance; and if for any reason he leaves the duty of detecting defects to another employee, he escapes all risk of damages. While perhaps it would not be wise to make him liable for secret defects, by making him a warrantor or insurer of the safety of the stock or appliances used in his business, would it not be well, instead of leaving him almost entirely free from liability, to make him responsible for defects to his workman, as he is now responsible to strangers? Is not this one of the exceptions to a general principle, one of the anomalies in the law which works an injustice?

Should it be said that the servant is not the master's agent, and therefore the master should not be responsible for his acts, the question is at once asked why he is not the master's agent. This brings up the real legal question at the bottom of this controversy, which involves the making of an implied contract for the parties by the courts, in the absence of an express contract. How is an agency created? Principally by virtue of the contract of service. What is the agency created? That depends principally upon the contract of service and the general authority usually conferred by the customs and usages of business upon workmen in the same class of employment. That the workman is an agent for the performance of some acts there is no doubt; but whether he is the agent for doing the particular act which caused the injury, is the question in dispute. How can this be answered? It is a question of fact simply, and not of law, and one manifestly to be answered from a knowledge of all the facts tending to explain the scope of the agency. And, as it is a question of fact, is it not one which, by analogy to the practice established in the courts for deciding

other matters of fact, ought to be decided by a jury, upon consideration of all the evidence? Even if decided by the judges, should it be determined by simply saying that the employee is not an agent for doing the act which caused the injury, because they (the judges) think it against public policy to imply a contract of liability?

That a workman knows the habits of his fellow-laborers better than does his employer, is doubtless true of persons engaged in domestic and menial service, working in the same household and under the same roof, at the same bench, in the same shop, or in the same gang, or, in brief, when engaged in similar occupations. And for this reason the Scotch courts attempted to limit the operation of common employment to the class of similar occupations; and, if they had been allowed to persist in this direction, and their example had been imitated by the courts of England and America, it is probable that by this limitation the hardship of this rule of non-liability would have been avoided. The doctrine of common employment, so called, was evidently intended by the judges who invented it to apply only to persons engaged in similar occupations. By widening its application to all persons at work for one master, or paid from one purse, it was made to include persons entirely unacquainted with each other's character, habits, ways, and manners of doing work, traits of carefulness or carelessness; in large factories, workshops, manufactories, or upon railroads extending over miles of country, with workshops in various places, workmen at many stations, engineers, conductors, firemen, brakemen, baggage masters on many trains, hundreds of employees, in manifold and dissimilar occupations; it was made to include men who never saw or perhaps never heard of each other, and therefore knew less of each other's habits than the superintendent, the board of directors, or the employers, who engaged them with some knowledge at least of their character, skill, proficiency and capacity.

That a change in the law would diminish wages is not certain, because it would seem the natural result of heavier responsibility to employ, with more care and circumspection in the selection, more competent and experienced workmen, who, being of a superior grade, would require superior pay.

As a legitimate result, in railroad and other specially dangerous employments, the public as well as the employee would be more secure.

A frequent objection to changing the burden of liability from the employee to the employer is, that employees would thereby become more careless of their own lives and safety, as well as of the welfare of others ; and railway travel especially would become less safe. This objection presumes that employees would purposely and dishonestly injure themselves in order to obtain damages. But the consideration should not be overlooked, that whenever any person is found guilty of such an act of wickedness, he is prevented from recovering damages by the rule of contributory negligence. It is only in instances of dishonesty towards himself and his employer, which remain undetected or unproved at the trial of the cause, that unjust damages would be recovered. Would not such instances be of infrequent occurrence? Are not the means for eliciting the truth, and the securities against imposture provided in the administration of justice, through the agency of judges, jurors, counsel, parties and witnesses, so perfect that little danger need be feared? Seldom does a sham or fraud withstand the ordeal of a jury trial. Is it often that such a man could long remain in any employment without his true character becoming known? Most men are almost always honest. And not only are most men honest because it is right, but many refrain from doing wrong, because honesty is the best policy. Moreover, is not life too dear, and pain too much dreaded, to make it probable that any man could become not only so degraded, but so callous to suffering, as to wilfully run the risk of losing an arm or a leg or his health, for the purpose of getting a partial compensation in money? And, if such instances are likely to occur so infrequently, ought the law, which tries to prescribe a rule of action that will do the greatest good to the greatest number, to be restrained from doing an act of justice to the many, lest a few dishonest persons should abuse the right?

Against the danger that excessive damages would be awarded, the ordinary protection afforded by courts of justice exists, which, in all other causes where damages are in

question, has for centuries existed as a suitable means of estimating the amount to be awarded. If verdicts are usually for the plaintiff, and against corporations, it is likewise true that plaintiffs are usually right. At least, no better and more practicable method has been devised for determining what is right and what is wrong, than what are called courts of justice. There seems to be little force in an argument which declines to pass a law because the amount of damages recoverable under it must be determined in the same way that land damages and other personal damages are determined; especially when the rule suggested is the best known method of deciding such a question; or, if it is not, some better method may be easily incorporated in the act.

The kindred danger, that a change in the law would be followed by a flood of litigation, seems to be groundless. A similar fear, existing prior to the passage of the English act, proved to be a mere fiction of the brain. How many bills have been defeated because it was feared attorneys would profit from resulting litigation? How many times has this argument been used by persons interested in defeating a measure? In the first eighteen months after the passage of the English act, as the statistics show, less than a hundred actions were brought under it in England, Scotland, Ireland and Wales, and less than £3,000 in damages recovered, with a like amount in costs. According to an estimate already given, based upon the most reliable data to be obtained, the probable number of maintainable suits against the railroads of this State during the year 1880-81 was twelve, and the probable amount of damages which could have been recovered was \$60,000.

Should it be said that one reason why it is sought to make the employer liable is simply because he has money, it might be candidly admitted that no wise friend of the laboring man would be in favor of a change in the law unless it was likely to do him some good; but it might also be answered that, as the employer reaps the profits of every profitable act, why should he not suffer the losses of unprofitable acts? Admitting that the workman is his employer's agent, commissioned with a general authority to use his own discretion, in place of the judgment of his principal, why, when the exercise of

this discretion proves unfortunate, should not the principal suffer the consequences? The prosecution of business is not like the game of pitch-penny played by the gambler, according to the rule of "Heads I win, and tails you lose." The same objection might be made with equal force against the liability of employers to third persons, or against any bill which seeks to make persons of property responsible for their wrongs or breaches of contract.

Several objections having been alluded to, it remains to summarize some of the reasons not specifically suggested in favor of a change in the law. Without asserting that an employee has a natural right to compensation for injuries directly or indirectly caused by his master, — which is a right oftener asserted by philosophers and publicists than by lawyers and legislators, — there is no doubt that ever since the reign of Charles the Second an established principle of common law has held every man responsible for his own torts and breaches of contract, a precedent which our ancestors might have found in the Roman Law. As early as the reign of William the Third, Lord Holt held a master liable for the negligence of his servant. The application of this general principle was without exception till the year 1837, when, as has been already related, Lord Abinger, in a case not very carefully considered, judging from the analogies reasoned from in the opinion, decided that a master was not liable for the negligence of his servant, whenever injury was thereby caused to a fellow-servant.* Shortly afterwards, at the time when railroads and manufacturing enterprises were in an early stage of development, this exception was followed and emphasized in this State by Judge Shaw in the case of *Farwell v. the Boston and Worcester Railroad*;† ever since which time the exception may be said to have been a part of the body of our law.

The liability imposed upon a master for the negligence of his servant may be said to exist under two sets of circumstances, in one of which there exists a relation between the master and the person injured, while in the other no relation exists. In one class of circumstances it exists by virtue of an express or implied contract; while the ground of

* *Priestly v. Fowler*, 3 M. & W. 1.

† 4 Met. 49.

liability in the other is the general obligation resting upon every member of the community so to act that no harm shall, by his negligence or that of his servant, be caused to any other person. This latter obligation is known as the principle of *respondeat superior*, which compels the master to respond for such negligence in damages; and is stated by Blackstone in these words: "If a master by his negligence does any damage to a stranger, the master shall answer for his neglect." Those who seek to base upon this principle their right to a change in the law of liability for the negligence of fellow-employees, say that the term "stranger," because, in the development of railroads and commercial and industrial enterprises, of the wide extent and remoteness of the relationship existing between an employer and his workman, should apply to all workmen not at work strictly under the eye and supervision of the master.

On the other hand, those persons who seek to base their right to a change of the law upon the relationship existing by virtue of the contract of service, say that where nothing to the contrary is expressed, the courts should imply a contract of liability, instead of implying, as they have done, a contract of non-liability. They assert, furthermore, a fact which is not denied, that the implied contract of non-liability is judge-made law, established by virtue of the right of the courts to decide what is public policy, and what the public policy of the country requires; that public policy no longer requires, if it ever did, the existence of such a rule of law; and that the legislature should, as it has a right to do, assert its prerogative, and declare a different public policy, by abolishing the exception made to the general liability of the master for the negligence of his servant.

In emphasizing the injustice of this exception, an argument is drawn, by analogy, from the liability imposed upon a common carrier for the loss, by fire or other means except the act of God or public enemies, of merchandize, livestock, and chattels entrusted for conveyance and safe delivery. And, as a change in the law will in this country affect railroad companies and common carriers of passengers more than other employers of labor, the analogy,

drawn from the contract of warranty and insurance that no injury shall occur to whatever is entrusted for safe delivery, is thought to be perfect. If this be so, — and it seems to be, — why should the law be more careful in the protection afforded to merchandize, than in the security placed around human life? Why should the State compel a railroad company to pay for the loss or injury of a horse, an ox, or a bale of goods, and allow men to be killed and maimed without the risk of paying damages?

And, as one of the incidental results of compelling common carriers of passengers to be as careful of their employees as they are of trunks and merchandise would be the employment of more competent and careful men, the security of travellers would be increased; and this is one of the weightiest reasons for changing the law. Scarcely a week occurs without an accident on some of the railroads of the State or country. As has been stated, during the nine years from 1872 to 1881 inclusive, there were 11,759 persons reported killed or injured on the various railroads of the country; and 2,744 reported killed or injured by the railroads of this Commonwealth. Almost every one of these deaths or injuries might, by the exercise of proper care, have been prevented. No one will deny that every step taken in the direction of making life more secure, and suffering less frequent, is a step in the right direction. Is it not possible that such a change in the law may be such a step?

Should it be asked if the workman cannot better provide against the carelessness of his fellow-workman than can the employer, it might be replied, that, although their co-operation is always necessary to secure safety, the value of any suggestions or complaints is diminished by the fact that the workman has no power to carry his ideas into execution. Employers of labor would naturally consider frequent complaints against their employees, frequent suggestions as to the necessity of repairs in the works or machinery, as officious interferences. And those who receive with good grace what are always in the nature of accusations, might not wish to encourage their occurrence, and might not accede readily to requests for improvements. It is a natural

characteristic to prefer to manage one's own business in one's own way, without too much interference from men hired and paid for their labor. But some one must be held responsible for every act of negligence, if its repetition would be prevented; and, when attempting to make accidents less frequent, is it not wiser to increase the employer's responsibility than to trust to his workmen to correct the evils of his manner of carrying on business?

It should not be forgotten that, in many cases where the employer escapes legal liability by means of the defence of common employment, the servant who, entrusted in his master's absence with the exercise of a general discretion, caused the injury, is more competent for performing the duties than his employer. In operations requiring skilled laborers, mechanics, and artificers, how seldom is it that the employer can do the work imposed upon those under him! How many men who can pay for the labor can perform it? When, therefore, it is thought unjust to impose responsibility for negligence upon the man who hires the workman, it should be remembered that oftentimes the person commissioned to act for him is better able than he to perform the duties imposed.

The injustice which sometimes is wrought in applying the defence of common employment is seen by remembering the variety of dissimilar occupations which it includes. The essence of common employment is a common employer, and all persons paid by the same person, or paid from the same purse, are fellow-employees. All the employees of a railroad company, of a colliery, of a steamboat company, of a factory, of a foundry, of a horse railroad or express company, whether employed in the same city, county or state, under the same or different foremen or superintendents, engaged at the main office or a branch office, known to each other or unknown, are fellow-employees, and are by law presumed to be sufficiently well acquainted with each other's habits and character to be compelled to run the risk of injury from each other's carelessness. Menial and domestic servants employed under the same roof, and therefore well acquainted with each other, should without doubt be considered fellow-employees. But the earliest use of this

doctrine was in its application to similar occupations only.

Because every man is liable for his own wrongful acts, employers who personally superintend or direct their own workmen are liable for personal injuries caused by what is really their own negligence. But when, in the increase of business, it becomes necessary to employ others to work for them, away from under their eyes, but obedient to their general authority, this liability for injuries to their employees ceases, although they still remain liable for similar negligence to others. It is thus seen that while the small manufacturer, in order to avoid suits for damages, must take precautions against the carelessness of his workmen, the large manufacturer is relieved from such a necessity.

And this anomaly becomes more marked in the organization of individuals into corporations. For, while a few persons acting together as co-partners are justly liable for their own and each other's negligence, upon complying with a simple perfunctory requirement of the law, and thereby becoming a corporation, they escape this liability, because they are no longer acting for themselves and each other, but as agents for the corporation, which is exempted from liability for the negligence of its agents in causing injury to each other.

It should not be forgotten that the laws of Great Britain, France, and Italy impose a general liability upon employers, whenever the negligence of their servants causes personal injury; while the law of Germany, as well as of several of the United States, has been so changed as to impose special liability upon railroad corporations for such acts of negligence.

DIFFICULTIES OF DRAWING A BILL.

It is oftentimes easier to point out the necessity for reform than to show how to accomplish it; and easier to prove that the law should be changed, than to show how it should be done. And, while many persons will agree in thinking that something ought to be done to change the law, they will doubtless differ as to whether the change shall be radical, liberal, or conservative; while there will be, perhaps, a dif-

ference in opinion among some of each of these classes as to the form and the particular phraseology of a bill looking to a change.

The first subject to be considered is how far the law should be changed; and upon this it must be conceded that it would be useless to make any change, unless the employer was made liable for the acts of his authorized agents in all cases where he has delegated his authority. Whether this should be done by saying that common employment shall no longer be a defence to actions against employers for personal damages, or that the particular instances in which he should be liable should be specified, is an important question. This problem has been solved in some of the States, as has been seen, by enacting that in actions of this kind against railway companies common employment shall not be a defence. The difficulty of accurately defining the term, of saying exactly what common employment is, and the danger lest some uncertainty should exist as to the exact scope of such a bill, as well as the consideration that it might not be wise to make so sweeping a change, are objections to this form of a bill. For example: The term, no doubt, includes menial and domestic servants; and would it be wise to make the head of a family responsible for the negligence of the servants who live under his roof? responsible, to use an illustration of Lord Abinger's, to one servant for the negligence of the chambermaid in putting him into a damp bed, or the cook's neglect to keep clean the copper vessels in the kitchen? Should it be attempted to draw the bill in this way, as was done by Mr. Macdonald, it might be advisable to except the master from liability for the acts of domestic servants. Should it be desired to draw the bill by specifying particularly when he shall be liable, leaving him free from liability when not otherwise specified, there is room for difference of opinion as to how far it shall be extended, — whether, for instance, an action shall be created for the negligence of the principal person in authority, the superintendent, which action has been shown to be of little value; or for the negligence of every superior workman, of whatever grade (which seems to be the only way to accomplish an important change), are questions for consideration.

One of the earliest of the bills presented to Parliament was brought in by Mr. Morrison, Mr. Hind-Palmer and Mr. Andrew Johnson in the year 1872; and Mr. Wright, a London barrister, assisted in drawing up and settling its terms. These gentlemen adopted this latter course, and specified in considerable detail the instances wherein a liability should be allowed to attach. But, while the discussion of the subject went on in Parliament among the friends of the employees, and the able secretaries, Parliamentary agents, and solicitors of their large associations, and when several special committees of Parliament had had the subject under consideration, and at last it had been thoroughly considered and comprehended by several of the leading members of the present Gladstone Ministry, — it was found possible to draft the bill in the few words of the second, third, and fourth sub-sections of the first section of the Act of 1880. These make the employer liable for the negligence of any person entrusted with superintendence, and of any superior workman whose orders or directions the person injured was bound to obey, or the act or omission of any workman who was acting in obedience to the rules or by-laws of the employer.

THE GLADSTONE BILL.

The caption and first section of the bill brought in and advocated by the English Liberals (before it was amended in the House of Lords by the Conservatives) is as follows: —

“AN ACT to extend and regulate the liability of employers to make compensation for personal injuries suffered by workmen in their service.

“*Be it enacted, etc.:*

“SECTION 1. Where, after the commencement of this act, personal injury is caused to a workman: —

“(1.) By reason of any defect in the condition of the ways, works, machinery or plant connected with or used in the business of the employer; or

“(2.) By reason of the negligence of any person in the service of the employer, who has any superintendence entrusted to him, whilst in the exercise of such superintendence; or

“(3.) By reason of the negligence of any person in the service of the employer, to whose orders or directions the workman at the time of the injury was bound to conform, and did conform, where such injury resulted from his having so conformed; or

"(4.) By reason of the act or omission of any person in the service of the employer, done or made in obedience to the rules or by-laws of the employer, or in obedience to particular instructions given by any person delegated with the authority of the employer in that behalf; or

"(5.) By reason of the negligence of any person in the service of the employer, who has the charge or control of any signal, points,* locomotive engine or train upon a railway, —

"The workman, or, in case the injury results in death, the legal personal representatives of the workman, and any persons entitled in case of death, shall have the same right of compensation and remedies against the employer as if the workman had not been a workman of nor in the service of the employer, nor engaged in his work."

BILLS PRESENTED.

We present for the action of the legislature, as the result of the very full consideration of the subject committed to us, two bills; the first, comprehending the features of the Gladstone Bill presented to Parliament by the Earl De la Warr, with sections added to make the measure practical in this State. This bill changes the doctrine of the courts on common employment to a limited extent, and is incorporated in this report for the reason that many legislators may desire to act upon a limited bill.

The second, and the bill we recommend as being most in harmony with existing legislation and the course of law in this State, is a bill which simply seeks to abolish common employment as a defence in actions contemplated by it.

I.

COMMONWEALTH OF MASSACHUSETTS.

In the Year One Thousand Eight Hundred and Eighty-Three.

AN ACT relating to the Liability of Employers for Personal Injuries sustained by their Employees.

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same as follows: —

SECTION 1. Where, after the commencement of this Act, personal injury is caused to an employee, —

(1.) By reason of any defect in the condition of the ways, works, machinery or plant connected with, or used in, the business of the employer; or

(2.) By reason of the negligence of any person in the service of the

*As the railroad trains of this State are not run and controlled in precisely the same way as English railways, this, in order to be applicable to our system, would need to be slightly changed; "points" should read "switch."

employer, who has any superintendence entrusted to him, whilst in the exercise of such superintendence; or

(3.) By reason of the negligence of any person in the service of the employer, to whose orders or directions the employee at the time of the injury was bound to conform, and did conform, where such injury resulted from his having so conformed; or

(4.) By reason of the act or omission of any person in the service of the employer done or made in obedience to the rules or by-laws of the employer, or in obedience to particular instructions given by any person delegated with the authority of the employer in that behalf; or

(5) By reason of the negligence of any person in the service of the employer, who has the charge or control of any signal, switch, locomotive engine, or train upon a railway, — the employee, or, in case the injury results in death, the legal personal representative of the employee, and any persons entitled in case of death, shall have the same right of compensation and remedies against the employer as if the employee had not been an employee of, nor in the service of the employer, nor engaged in his work.

SECT. 2. Written notice of any injury shall be given to the employer or his legal representatives by or on behalf of the person injured; or, in case of his death, by or on behalf of his legal representatives, within sixty days of the injury or death, stating the time, place, and cause thereof; and the action thereon shall be commenced, if at all, within six months from the date of the accident; or, in case of death, within six months from the date thereof.

SECT. 3 This act shall take effect on the first day of January, eighteen hundred and eighty-four.

II.

Commonwealth of Massachusetts.

In the Year One Thousand Eight Hundred and Eighty-three.

AN ACT

Relating to the Liability of Employers for Personal
Injuries sustained by their Employees.

*Be it enacted by the Senate and House of Representatives
in General Court assembled, and by the authority of the
same, as follows:*

1 SECTION 1. Whenever an action is brought
2 against an employer to recover damages for per-

3 sonal injuries received by an employee while in
4 the discharge of his duty, the fact that the injury
5 was caused by or through the negligence of a
6 fellow-employee shall not prevent the recovery of
7 damages, unless the employee materially contrib-
8 uted by his own negligence to the cause of the
9 injury, or both the person causing and the person
10 receiving the injury were engaged at the time of
11 the injury in domestic or menial service.

1 SECT. 2. Written notice of any injury shall be
2 given to the employer or his legal representatives
3 by or on behalf of the person injured; or, in case
4 of his death, by or on behalf of his legal repre-
5 sentatives, within sixty days of the injury or death,
6 stating the time, place, and cause thereof; and
7 the action thereon shall be commenced, if at all,
8 within six months from the date of the accident;
9 or, in case of death, within six months from the
10 date thereof.

1 SECT. 3. This act shall take effect on the first
2 day of January, eighteen hundred and eighty-
3 four.

APPENDIX A.

EMPLOYERS' LIABILITY ACT, 1880.

(43 & 44 VIC. c. 42) 7th SEPT., 1880.

AN ACT to extend and regulate the liability of employers to make compensation for personal injuries suffered by workmen in their service.

Be it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

SECT I Where, after the commencement of this Act, personal injury is caused to a workman,—

Amendments of law.

(1.) By reason of any defect in the condition of ways, works, machinery or plant, connected with or used in the business of the employer; or

(2.) By reason of the negligence of any person in the service of the employer, who has any superintendence entrusted to him, whilst in the exercise of such superintendence; or

(3.) By reason of the negligence of any person in the service of the employer, to whose orders or directions the workman, at the time of the injury, was bound to conform, and did conform, where such injury resulted from his having so conformed; or

(4.) By reason of the act or omission of any person in the service of the employer, done or made in obedience to the rules or by-laws of the employer, or in obedience to particular instructions given by any person delegated with the authority of the employer in that behalf; or

(5.) By reason of the negligence of any person in the service of the employer, who has the charge or control of any signal, points, locomotive engine, or train upon a railway,—

The workman, or, in case the injury results in death, the legal personal representatives of the workman, and any persons entitled in case of death, shall have the same right of compensation and remedies against the employer as if the workman had not been a workman or nor in the service of the employer, nor engaged in his work.

SECT. II. A workman shall not be entitled, under this Act, to any right of compensation or remedy against the employer in any of the following cases (that is to say):—

Exceptions to amendments of law.

(1.) Under sub-section 1 of section I, unless the defect, therein mentioned, arose from, or had not been discovered or remedied, owing to the negligence of the employer, or of some person in the service of the employer, and intrusted by him with the duty of seeing that the ways, works, machinery or plant were in proper condition.

(2.) Under sub-section 4 of section I, unless the injury resulted from some impropriety or defect in the rules, by-laws, or instructions therein mentioned; provided that where a rule or by-law has been approved or has been accepted as a proper rule or by-law by one of Her Majesty's Principal Secretaries of State, or by the Board of Trade, or any other department of the Government, under or by virtue of any Act of Parliament, it shall not be deemed, for the purpose of this Act, to be an improper or defective rule or by-law.

(3.) In any case where the workman knew of the defect or negligence which caused his injury, and failed, within a reasonable time, to give, or cause to be given, information thereof to the employer, or some person superior to himself, unless he was aware that the employer or such superior already knew of the said defect or negligence.

Limit of
sum recov-
erable as
compensa-
tion.

SECT. III. The amount of compensation recoverable under this Act shall not exceed such sum as may be found to be equivalent to the estimated earnings, during the three years preceding the injury, of a person in the same grade employed during those years in the like employment, and in the district in which the workman is employed at the time of the injury.

Limit of
time for re-
covery of
compensa-
tion.

SECT. IV. An action for the recovery, under this Act of compensation for an injury, shall not be maintainable unless notice that injury has been sustained is given within six weeks, and the action is commenced within six months from the occurrence of the accident causing the injury, or, in case of death, within twelve months from the time of death; provided always, that in case of death the want of such notice shall be no bar to the maintenance of such action, if the judge shall be of opinion that there was reasonable excuse for such want of notice.

Money pay-
able under
penalty to
be deducted
from com-
pensation
under act.

SECT. V. There shall be deducted from any compensation awarded to any workman, or representatives of a workman, or persons claiming by, under or through a workman in respect of any cause of action arising under this Act, any penalty or part of a penalty which may have been paid in pursuance of any other Act of Parliament to such workman, representatives, or persons in respect of the same cause of action; and where an action has been brought under this Act by any workman, or the representatives of any workman, or any persons claiming by, under or through such workman, for compensation in respect of any cause of action arising under this Act, and payment has not previously been made of any penalty or part of

a penalty, under any other Act of Parliament in respect of the same cause of action, such workman, representatives or person shall not be entitled thereafter to receive any penalty or part of a penalty under any other Act of Parliament, in respect of the same cause of action.

SECT. VI. (1.) Every action for recovery of compensation under this Act shall be brought in a county court, but may, upon the application of either plaintiff or defendant, be removed into a superior court in like manner and upon the same conditions as an action commenced in a county court may be by law removed.

Trial of actions.

(2.) Upon the trial of any such action in a county court before the judge without a jury, one or more assessors may be appointed for the purpose of ascertaining the amount of compensation.

(3.) For the purpose of regulating the conditions and mode of appointment and remuneration of such assessors and all matters of procedure relating to their duties, and also for the purpose of consolidating any actions under this Act in a county court, and otherwise preventing multiplicity of such actions, rules and regulations may be made, varied and repealed from time to time, in the same manner as rules and regulations for regulating the practice and procedure in other actions in county courts.

"County Court" shall, with respect to Scotland, mean the "Sheriff's Court," and shall, with respect to Ireland, mean the "Civil Bill Court."

In Scotland any action under this Act may be removed to the court of session at the instance of either party, in the manner provided by and subject to the conditions prescribed by section 9 of the Sheriff Courts (Scotland) Act, 1877.

40 and 41
Vic. c. 50.

In Scotland the sheriff may conjoin actions arising out of the same occurrence or cause of action, though at the instance of different parties and in respect of different injuries.

SECT. VII. Notice in respect of an injury under this Act shall give the name and address of the person injured, and shall state in ordinary language the cause of the injury and the date at which it was sustained, and shall be served on the employer, or, if there is more than one employer, upon one of such employers.

Mode of
serving notice of injury.

The notice may be served by delivering the same to or at the residence or place of business of the person on whom it is to be served.

The notice may also be served by post by a registered letter addressed to the person on whom it is to be served, at his last known place of residence or place of business; and, if served by post, shall be deemed to have been served at the time when a letter containing the same would be delivered in the ordinary course of post; and, in proving the service of such notice,

it shall be sufficient to prove that the notice was properly addressed and registered.

When the employer is a body of persons corporate or unincorporate, the notice shall be served by delivering the same at or by sending it by post in a registered letter addressed to the office, or, if there be more than one office, any one of the offices of such body.

A notice under this section shall not be deemed invalid by reason of any defect or inaccuracy therein, unless the judge who tries the action arising from the injury mentioned in the notice, shall be of opinion that the defendant in the action is prejudiced in his defence by such defect or inaccuracy, and that the defect or inaccuracy was for the purpose of misleading.

Definitions. SECT. VIII. For the purpose of this Act, unless the context otherwise requires,—

The expression, “person who has superintendence entrusted to him,” means a person whose sole or principal duty is that of superintendence, and who is not ordinarily engaged in manual labor;

The expression, “employer,” includes a body of persons corporate or unincorporate;

38 and 39
Vic. c. 90.

The expression, “workman,” means a railway servant and any person to whom the Employers and workmen Act, 1875, applies.

(38 and 39 Vic., chap. 90, sect. 10. In this Act, the expression “workman” does not include a domestic or menial servant, but, save as aforesaid, means any person who, being a laborer, servant in husbandry, journeyman, artificer, handicraftsman, miner, or otherwise engaged in manual labor, whether under the age of twenty-one years or above that age, has entered into or works under a contract with an employer; whether the contract be made before or after the passing of this Act, be express or implied, oral or in writing, and be a contract of service, or a contract personally to execute any work or labor.)

Commence-
ment of act.

SECT. IX. This Act shall not come into operation until the first day of January, 1881, which date is in this Act referred to as the commencement of this Act.

Short title.

SECT. X. This Act may be cited as the Employers' Liability Act, 1880, and shall continue in force till the thirty-first day of December, 1887, and to the end of the then next session of Parliament and no longer, unless Parliament shall otherwise determine; and all actions commenced under this Act before that period shall be continued as if the said Act had not expired.

APPENDIX B.

EXTRACTS FROM CIRCULAR ISSUED BY BALTIMORE & OHIO RAILROAD COMPANY, PROMULGATING THE ORGANIZATION OF AN EMPLOYEES' RELIEF ASSOCIATION.

BALTIMORE & OHIO RAILROAD COMPANY,

BALTIMORE, May 1, 1880.

To the Employees of the Baltimore & Ohio Railroad Company and of its Divisions and Branches:

The Baltimore & Ohio Railroad Company having been petitioned by its employees to aid and countenance them in the organization of a benevolent relief society, and being desirous of securing to them the advantages which experience has uniformly shown may be enjoyed by the employees of railroad and other large corporations, where associations of that character are in operation, has devised for them a plan embodying, as it believes, the best features of such associations.

Reasons for
organizing
society.

Also, having learned of the pecuniary necessities of persons formerly in its service, and being anxious and solicitous that its present and future employees, although escaping accidents and sickness whilst in the discharge of duty, shall not find themselves without the means of support, whenever, through approaching old age or the contraction of infirmities, they become unable to perform the services assigned them or earning a livelihood in other pursuits, it has added to the indemnity features of the plan a superannuation or annuity provision, which it commends to their consideration and adoption.

Reasons for
introducing
annuity feature.

To give force and effect to this plan and as an earnest of its solicitude for their comfort and welfare, the company has contributed \$100,000 as the nucleus of a fund from which its employees can derive pecuniary relief in the event of becoming incapacitated for earning their livelihood, or by means of which, in the event of death, they may leave some provision for their families, upon condition that they will second its endeavor to promote their welfare by making such contributions to the fund as will secure its permanency and effectiveness.

Contributions of B. & O. R. R. Co. to fund.

The company will also, without expense to the fund, give the services of its staff in conducting the clerical and other business necessary to its proper management; office-room for

B. & O. R. R. Co. to pay expenses of management.

its records, etc.; and, whenever it is necessary or desirable to employ females or children for such work as they are qualified to perform, preference will be given to the widows, wives, sisters and children of its faithful contributing employees, over other applicants, in the order above named.

Free transportation of contributor's children.

Half rate transportation for contributors and families.

Medical attendance.

It will also make arrangements by which the children of those contributing to the fund, under sixteen years of age, shall travel free when going to or returning from school, over all its lines, for distances under ten miles, and will give half-fare transportation to contributors, their wives and children, travelling over its lines.

Skilful medical attendance will be provided free of expense to all contributors who may be injured while performing any duty assigned them by competent authority.

AN INDEMNITY FOR ACCIDENT AND DEATH CONSEQUENT THEREUPON, SICKNESS AND DEATH FROM NATURAL CAUSES.

Division of contributors into classes.

In order to insure a proper and just discrimination in the imposition of rates between the employees whose occupations render them peculiarly liable to accidents and others not so liable, they will be divided into two classes, viz.:—

1st Class. Those engaged in operating trains and rolling stock;

2d Class. Those not so engaged.

The first class will contribute monthly, in advance, according to the following scale, viz.:—

Specifying who shall contribute to 1st class.

Those receiving \$35 and under per month will contribute \$1.00 a month, entitling each to one benefit.

Those receiving over \$35 and not more than \$50 per month, will contribute \$2.00 a month, entitling each to two benefits.

Those receiving over \$50 and not more than \$75 per month, will contribute \$3.00 a month, entitling each to three benefits.

Those receiving over \$75 and not more than \$100 per month, will contribute \$4.00 a month, entitling each to four benefits.

Those receiving over \$100 per month will contribute \$5.00 a month, entitling each to five benefits.

Specifying who shall contribute to 2d class

The second class according to the following scale, viz.:—

Those receiving \$35 and under per month will contribute 75 a month, entitling each to one benefit.

Those receiving over \$35 and not more than \$50 per month, will contribute \$1.50 a month, entitling each to two benefits.

Those receiving over \$50 and not more than \$75 per month, will contribute \$2.25 a month, entitling each to three benefits.

Those receiving over \$75 and not more than \$100 per month, will contribute \$3.00 a month, entitling each to four benefits.

Those receiving over \$100 per month will contribute \$3.75 a month, entitling each to five benefits.

As the Baltimore & Ohio Railroad Company agrees to bear all the expenses incident to the management of the fund, the contributors to it will receive, *without deduction for expenses*, all the benefits secured by their own payments and the company's contribution, and any surplus remaining at the end of each year will be devoted to the reduction of the rates of their contributions.

Fund not to be taxed for expenses, and contributors to receive benefit of surplus.

Participation in the benefits of this Association is to be voluntary as regards officials receiving an annual compensation of over \$2,000, and those whose duties are in nowise hazardous and such as to render them liable to railroad casualties. All other employees on the main stem, branches and divisions are expected to subscribe to so much of its relief features as relate to indemnity, for injuries or death, occurring while in the discharge of duty and in the company's service.

Designates who may participate in benefits of fund.

The fund thus constituted is to be controlled by a committee of management, partly elected by the contributors, and partly appointed by the Baltimore & Ohio Railroad Company, in manner hereinafter explained, and devoted exclusively to relieving the necessities of those contributing to it, in the following contingencies, viz.:—

Funds — how controlled.

For what purposes used.

1. In case of the temporary disablement of any contributing employee whilst in the discharge of duty and in the company's service, the payment to him or to his order, of a daily allowance, payable monthly, for a period not exceeding six months from the date of accident.

Temporary disablement payments.

2. In case of permanent disablement, happening to a contributing employee, from accident whilst in the discharge of duty and in the company's employ, incapacitating him from earning a livelihood, the monthly payment of a specified allowance for his support *during the continuance of such disablement*.

Permanent disablement payments.

3. In case of the death of a contributing employee by accident arising whilst in the discharge of duty and in the company's service, the payment of a specified sum to the person designated by him to receive the same, or to his legal representative.

Indemnity for death by accident.

4. In case of injury or sickness from any cause *other than* accident whilst in the discharge of duty in the company's service, causing total inability to labor, the monthly payment of a specified allowance for his support, for a period not exceeding one year from commencement of disability.

Sick payment.

5. In the event of the death of a contributing employee, occurring from any *other* cause than accident arising whilst in the discharge of duty and in the company's service, the payment of a specified sum to the person designated by him to receive the same, or to his legal representative.

Indemnity for death from natural causes.

The allowances thus indicated shall be based upon the contributions made by the beneficiary, according to the following scale:—

Allowances — how calculated.

SCALE.

	1.	2.	3.	4.	5.
	In case of temporary disablement by accident, whilst in the discharge of duty and in the company's service, the same being professionally certified in such manner as may be required by the committee of management, the monthly payment, for a period not exceeding six months, of	In case of permanent disablement and incapacity to resume employment arising from accident whilst in the discharge of duty in the company's service, the same being professionally certified in such manner as may be required by the committee of management, the monthly payment (after the sixth month) during continuance of such disablement, of	In case of death arising from accident whilst in the discharge of duty and in the company's service, subject to rules governing this class of cases, the payment to the person designated by the deceased, or to his legal representative, within sixty days after death, of	In case of injury or sickness from any cause other than accident whilst in the discharge of duty in the company's service, causing total inability to labor, subject to the rules governing this class of cases, the payment (not longer than one year) of a daily allowance of	In case of death arising from any cause other than accident whilst in the discharge of duty in the company's service, subject to rules governing this class of cases, the payment to the person designated by the deceased, or to his legal representative, within sixty days after death, of
	PER DAY.	PER DAY.			
Those receiving per month \$35 and under, . . .	\$0 50	\$0 25	\$500	\$0.50	\$100
Those receiving per month over \$35 and not more than \$50, . . .	1 00	0 50	1,000	1 00	200
Those receiving per month over \$50 and not more than \$75, . . .	1 50	0 75	1,500	1 50	300
Those receiving per month over \$75 and not more than \$100, . . .	2 00	1 00	2,000	2 00	400
Those receiving per month over \$100, . . .	2 50	1 25	2,500	2 50	500

Contributors may take higher benefits.

Contributions—how levied.

Any contributor will be entitled to the higher rates of relief by paying the contributions provided for those rates.

Contributions will, in all cases, be deducted monthly from the members' wages, so that payments will be required of them only when they have earned wages; and the allowance will, in all cases, be proportioned to the monthly contributions paid by each person in the several classes into which the contributors have been divided.

Disablement allowances to be paid monthly.

In cases of disablement the allowance will be paid not less than once every month; before each payment, whether for temporary or permanent disability, satisfactory evidence of its existence must be furnished.

* * * * *

To constitute a lawful claim for accident indemnity there must be : —

1st. Exterior or patent evidence of injury, and satisfactory testimony that it resulted from accident whilst in the discharge of duties assigned the contributor by the company, and incapacitates him from earning a livelihood.

What constitutes a legal claim for accident indemnity.

2d. In case of death, that the injuries sustained by such accident were the sole and direct cause of death ; or

3d Not resulting from accidents whilst performing the company's service, that it was not caused by injuries received whilst engaged in unlawful enterprises or riots. The managers are to be the exclusive judges as to whether the injuries have been so caused and received, and their decision shall be final and conclusive.

What constitutes claim for death indemnity.

All legitimate claims for death allowance will be paid in full, irrespective of any previous payments which may have been made under the head of temporary disability allowance ; but the managers are to have power to require such information and particulars as they deem necessary to establish the validity of the claim of any person applying for allowance.

Death claims to be paid in full, irrespective of previous payments.

In urgent cases the managers have power to pay part of the death allowance within a shorter period than sixty days, but the whole will always be paid within that time.

Death allowance to be paid within sixty days.

* * * * *

The several subscriptions to the fund will be deducted monthly, or whenever salaries are paid by the company's paymasters, in advance, and will be held subject to investment or disbursement as the managers may decide.

Collection of subscriptions.

* * * * *

The managers are to be chosen partly by the Baltimore & Ohio Railroad Company, on account of its interest in the fund, and partly by the contributors to it. The company are to choose four, and the contributors five — the majority of those selected.

Managers — how chosen.

* * * * *

The condition of the fund is to be annually investigated and reported on by a proper and competent person, to be selected by the managers for that purpose.

Annual investigation into condition of fund.

* * * * *

The Baltimore & Ohio Railroad Company guarantees fulfilment of the benefits herein indicated.

B. & O. R. Co. guarantees benefits herein enumerated

RELIEF AND ANNUITY FEATURES.

CONSTITUTION.

Title of Association. ARTICLE I. This society shall be known as "The Baltimore & Ohio Employees' Relief Association."

Objects. ARTICLE II. Its object shall be to provide for its members while they are disabled by accidents, sickness or by old age, and, at their deaths, for their families.

ARTICLE III. Such provision shall include:—

Surgical attendance. 1st. Surgical attendance for its members, when injured by accidents while in the discharge of duty and in the service of the Baltimore & Ohio Railroad Company, or of any other railroad company whose employees shall be admitted to the privilege of membership by a vote of the managers of this society, who shall contract with physicians and surgeons residing at all practicable points along the lines of the roads aforesaid for such attendance

Allowance for temporary disablement. 2d. There shall be paid to every contributor of the smallest (or 1st) class thus injured by accident, while totally unable to labor, fifty cents for each working day thus lost, and to contributors of higher classes larger sums, proportionate to their contributions; but, after six months' disability, these payments shall be reduced one-half. They shall not be made until certificates satisfactory to the managers have been received from the supervisor or head of department or division, that the accident occurred while the person injured was in the discharge of duty and in the company's service, and from one of the society's surgeons that this accident had caused total disability for labor for the time specified in the certificate.

Indemnity for death from accident. 3d. In the event of the death of a contributor, occurring solely by reason of, and at the time or within six months after an accident, while in the discharge of duty in the service of either of the companies aforesaid: in the case of a contributor of the smallest class there shall be paid to the person designated by him in the application for membership to receive the same, or to his legal representative, if there be no such person, the sum of \$500, and in the cases of contributors of higher classes larger sums, proportionate to their monthly contributions; but all the payments shall be conditioned upon the

certification of the requirements above specified, by one of the designated surgeons of the society and by the member's supervisor, head of department, or other official of higher authority.

As it is not contemplated in this scheme to give double benefits in cases of disability or death resulting from accidents, the benefits herein promised shall not be payable nor paid when the contributor, or any person entitled to damages because of the accident to him, whether resulting in death or not, has or makes a claim against said company, or any of the companies operating its branches or divisions (including the Chicago division), until there be first filed with the committee a release, satisfactory to them, releasing said companies from such damages, signed by all persons entitled to the same.

Relinquish-
ment of
claims for
damages.

4th. There shall be paid to every contributor of the smallest (or 1st) class, in the case of injury or sickness arising from any *other* cause than accident occurring in the discharge of duty in the company's service, while totally unable to labor, fifty cents for each working day thus lost, and to contributors of higher classes larger sums, proportionate to their contributions. But these payments shall only continue one year after the employee ceases to contribute to the relief fund, and shall not be made in cases of disablement of less than six working days' duration, and then only when certificates satisfactory to the managers have been received from a duly registered medical practitioner, corroborated by the contributor's superintendent or head of department, that sickness or injury had caused total disability for labor for the time specified in the certificate.

Indemnity
for sickness
from ordi-
nary causes.

5th. In the event of the death of a contributor, occurring while in the service of either of the aforesaid companies, neither by his own act, nor by the hands of justice, nor in violation of the laws of the State wherein he was injured or died, nor by such accidents as will secure relief from this society as already provided for in this constitution, there shall be paid: in the case of each contributor in the smallest class, to the person designated in his application for membership to receive the same, or, if there be no such person, then to his legal representative, the sum of \$100, and in the cases of contributors in higher classes larger sums, proportionate to their monthly contributions; conditioned, however, upon the presentation of proof satisfactory to the managers that death occurred within the requirements herein set forth.

Indemnity
in case of
death from
natural
causes.

ARTICLE IV. Participation in the benefits of this Association shall be voluntary as regards officials receiving an annual compensation of over \$2,000, and those whose duties are in nowise hazardous and such as to render them liable to railroad casualties. [All other employees on the main stem, branches and divisions are expected to subscribe to so much of its relief features as relate to indemnity for injuries or death occurring while in the discharge of duty and in the company's service.

Subscrip-
tions.

When employees may waive ordinary death payments.

Employees who are unmarried or who have no immediate families dependent upon them for support, may waive the benefits accruing in case of death from any cause other than from injuries received in the discharge of duty; in which case a reduction of twenty-five cents per month on smallest, and proportionately larger reductions on other contributions, will be allowed.]

Contributors disabled from natural causes shall hold their right to death indemnity for one month.

ARTICLE V. When a contributor shall be disabled by sickness or accident from earning any wages, and it shall be so certified by a surgeon employed by the society, he shall, notwithstanding, be entitled to the benefits of this society for one month after the time for which his contributions have been paid, and also for a period extending from the day he resumes labor to the first subsequent payment of wages.

Nature and amount of members' contribution.

ARTICLE VI. For the several benefits herein set forth — medical attendance, temporary and permanent disablement indemnity, allowance for death by accident and death from other causes — each member receiving a monthly compensation of \$35 and under shall pay, in advance, a monthly contribution of \$1, if engaged in operating trains or rolling stock, or 75 cents per month if not so engaged; which shall entitle him to the benefits above assigned to the contributors in the smallest class.

First, or smallest class.

Those receiving over \$35 and not more than \$50 per month, shall pay double the contributions paid by the smallest class of contributors, and receive double their benefits.

Payments by 2d class of contributors.

Those receiving over \$50 and not more than \$75 per month, shall pay three times as much as the smallest class of contributors, and receive three times their benefits.

Payments by 3d class of contributors.

Those receiving over \$75 and not more than \$100 per month, shall pay four times as much as the smallest contributors, and receive four times their benefits.

Payments by 4th class of contributors.

Those receiving over \$100 per month shall pay five times as much as the smallest contributors, and receive five times their benefits.

Payments by 5th class of contributors.

Provision reducing rates of contribution.

ARTICLE VII. These rates of payment shall continue only the first year of membership, and at the end of September of every year the managers shall make up a statement of the receipts from the members and of the payments to them, and of the future liabilities of the Association to them, as ascertained by some competent person to be employed by the managers for that purpose; and the whole of the surplus thus ascertained shall be used to reduce the next year's contribution, or to increase the allowance for natural deaths, or shall be otherwise devoted to promoting the interests of the Association, in such manner and at such times as shall be deemed best by the committee of management.

Uses to which company's con-

ARTICLE VIII. As the Baltimore & Ohio Railroad Company for the purpose of guaranteeing the above payments and of

lessening the contributions of the members of this society, have consented to bear all the expenses necessary to the proper management of its affairs, and have contributed \$100-000 towards its funds, the whole of the interest received from its contribution shall also be used every year to lessen the contributions of the company's employees.

tribution shall be applied.

ARTICLE IX. The managers shall, from time to time, provide for the visitation of the persons on the allowance list, besides that of the attending surgeon or physician, and no member refusing to submit to an examination by such visitor shall be entitled to receive any benefits from the fund during the continuance of such refusal.

Extra visitation of disabled members.

ARTICLE X. All liabilities on account of death shall be payable within sixty days after receipt of notice of death.

Payment of death liabilities.

ARTICLE XI. The monthly payments shall, in all cases, be deducted from the wages of the members; when there are no wages, no payments can be made.

Contributions — how and when collected.

ANNUITY FUND.

ARTICLE XII. Any one may make regular contributions to this fund, of any amount he sees proper to set aside as the basis of an annuity.

Annuity contributions.

ARTICLE XIII. If he continues his contributions until he has arrived at the age of sixty-five, he shall receive an *annual* allowance, as long as he lives, of ten cents for each and every dollar he has paid into the annuity fund; and an addition of one half cent on the dollar for every year his contributions have continued. To illustrate: —

Nature and extent of annuity allowance.

If he begins at thirty-five and continues his contributions until he reaches the age of sixty-five, at the rate of five dollars a month, he will have paid into the annuity fund, in the thirty years, eighteen hundred dollars; which will entitle him to an *annual* allowance for the remainder of life, of ten cents on the dollar, or one hundred and eighty dollars, and an addition of one-half cent on each dollar for the thirty years his contributions have continued, or fifteen cents on each of the eighteen hundred dollars he has paid; making an addition of two hundred and seventy dollars, and the whole allowance, four hundred and fifty dollars, each year he lives after attaining the age of sixty-five

Illustration.

ARTICLE XIV. If at any time he stops his contributions to, but does not withdraw them from the annuity fund, he shall receive, after arriving at the age of sixty-five, an *annual* allowance, for the remainder of life, of ten cents on the dollar for all he has paid into it, and an addition of one-half cent on the dollar for each of the years — counting from the middle of the period during which he contributed — to sixty-five. To illustrate: —

Rights of those discontinuing contributions.

If he begins at forty-five to contribute at the rate of five

Illustration.

dollars a month, and stops at fifty-five, his contributions will have amounted to six hundred dollars; which will entitle him, after arriving at the age of sixty-five, to an *annual* allowance of ten cents on the dollar on all he has contributed, or sixty dollars a year, and an addition of one-half cent on the dollar for each year counting from fifty — the middle of the period during which he has contributed — to sixty-five; making in all fifteen years (seven and one-half cents on each dollar paid), or forty-five dollars a year; which, added to the sixty, will make one hundred and five dollars *annual* allowance to be paid him as long as he may live.

Rights in
event of
death.

ARTICLE XV. If he shall die before arriving at the age of sixty-five, the person designated in his certificate, or, if there be no such person, his legal representative, shall receive all he has contributed to this fund, *and one-half more*.

Amount re-
turned in
case of
withdrawal
from fund.

ARTICLE XVI. If he shall withdrawn from participation in the benefits of this fund, there shall be returned to him three-fourths of the total sum he has contributed thereto.

Annuity
may com-
pound life
payments.

ARTICLE XVII. Any member, after becoming a recipient on this fund, may at any time before arriving at the age of seventy receive a sum, in one payment, equal to five years' allowance under the schedule. in place of all future allowances.

COMMITTEE OF MANAGEMENT.

Constitution
of Commit-
tee of man-
agers.

ARTICLE XVIII. The president of the Baltimore & Ohio Railroad Company shall be, *ex officio*, a member of the committee of management, which, in addition, shall consist of four members to be appointed by the Baltimore & Ohio Railroad Company, and five elected by the contributors.

Election for
managers.

ARTICLE XIX. The first election for managers shall take place on the first Wednesday after the first day of July, 1880, and until that election takes place the president of the Baltimore & Ohio Railroad Company shall designate the persons to represent the contributors in the board. Subsequent elections shall take place on the first Wednesday following the first day of January of every year.

Voting by
contribu-
tors.

ARTICLE XX. At these elections for managers each person shall be entitled to vote in proportion to his monthly contributions, and shall have the right to vote by proxy.

Managers
not entitled
to compen-
sation.

ARTICLE XXI. No person shall be entitled to receive any compensation or salary by reason of his service upon the committee of management.

Investment
of funds.

ARTICLE XXII. The moneys belonging to the fund of this society, not wanted for immediate use, shall be invested by the managers in United States bonds, Maryland State and Municipal bonds, Baltimore & Ohio Railroad bonds, stocks or other obligations, and other first-class securities. All securities and the moneys necessary to meet current expenses shall be entrusted to the official custody of the treasurer of the Baltimore

Custody of
funds.

& Ohio Railroad Company, to be held subject to the requisition of the committee of management.

ARTICLE XXIII. All the benefits offered by this society are guaranteed by the Baltimore & Ohio Railroad Company.

Benefits guaranteed by B. & O. R. R. Co.

ARTICLE XXIV. The managers will elect a secretary from the contributors, who shall perform the usual duties attached to that office.

Appointment and duties of secretary.

ARTICLE XXV. Should any difference arise between any claimants for the benefits herein set forth and the committee of management, it shall be submitted to three arbitrators; one to be chosen by each party and the third by the two thus chosen; whose decision shall be final.

Settlement of disputes.

ARTICLE XXVI. All the contributions due by the members of this society shall be paid in advance, by being deducted from the monthly wages due them by either of the companies aforesaid, and every person signing these rules hereby assents to such reduction.

Contributions — when paid.

ARTICLE XXVII. None of the provisions of this constitution shall be altered, modified or repealed, nor shall any new rule be made, except at a general meeting of the committee of management. Three months' notice must be given of any such proposed change or modification, and every such amendment, repeal, of an old rule, or introduction of a new one, shall be inoperative until confirmed by a two-thirds majority vote of the members of this society, or by two-thirds of the committee of management, at a subsequent general meeting.

Modification, repeal, &c., of rules.

BY-LAWS OF THE RELIEF ASSOCIATION.

1st. Whenever suit is brought by a member of the Association against the B. & O. R. R. Co., or any of the companies operating its branches or divisions, including the Chicago division, such member shall forfeit all claim to any benefits accruing to him subsequent to the date of the institution of the suit.

2d. No member of the Association shall, without the assent in writing, of the Secretary of the Association, assign or transfer to any person, other than the one named in his application, any benefit due him by the Association under its constitution and by-laws, and any such attempted assignment without such written consent shall be a forfeiture of all claims of the beneficiary or transferee to such benefits.

3d. Each and every vacancy occurring in the committee of management shall be filled through the election, by the committee, of a member of the Relief Association, to serve the unexpired portion of the term of the committeeman whom he succeeds.

No em-
ployee over
forty-five
years ad-
mitted to
Relief As-
sociation.

Regulations
regarding
joining As-
sociation.

Examina-
tion of ap-
plicants for
admission
to com-
pany's ser-
vice.

Minors.

Premiums.

Liability of
Association
for pay-
ments to
members.

Return of
premiums
on leaving
service.

4th. 1. Ample opportunity to investigate the merits and witness the practical operations of the Association having been given all employees, and it being important for its future welfare that some attention be given the physical condition of those hereafter seeking admission, notice is given that no employee of the company over forty-five years of age, and who cannot produce a medical certificate of sound health, will be admitted to share its privileges and benefits.

2. It is the duty of all officials employing men for the company's service to see that they are in good physical health and free from disease, and are not over forty-five years of age. In order to enable them to do this, they can at all times command the services of the medical inspectors to examine applicants for admission to the service. It is also their duty to see that applications are properly filled up, witnessed by some person permanently employed by the company, and promptly forwarded to the Secretary of the Association at Camden Station.

All minors' applications for membership must have the consent of parent or guardian written on their faces.

Employees are entitled to the benefits of the Association only from the date of perfecting their applications for membership.

3. Premiums are deducted monthly, in advance, on the pay-rolls of the company (the word month in this connection being construed to mean calendar month). They must be paid for the time intervening between the date of the application and the next month's payment. The amount thus due may be paid on entering the service, otherwise it must be added to the first full monthly premium, and deducted on the pay-roll, — proper notation thereof being made.

4 As the Relief Association was organized by the Baltimore & Ohio Company solely for the benefit of its own employees, and as, under the terms of the constitution, the responsibility of the Association ceases from the date a member leaves the service of the company (unless he be then drawing allowance from the Association for sickness incurred or accident received while in the service), no insurance premium is to be deducted from the final payment to a member, and so much of the premium last paid by him as covers the fractional part of the month succeeding the date he leaves the service is to be returned to him by the person paying his wages. A separate receipt is, in every instance, to be taken for such refundment, and forwarded to the Secretary of the Association at Camden Station, when the money thus refunded will be properly credited to the party paying it. The retained pay-rolls will ordinarily show the amount to be refunded, but where they are not accessible, or the amount cannot be satisfactorily ascertained, the information can be procured from the Secretary of the Association.

5. When disabled for duty by any cause specified in the constitution, members are entitled to the payments provided therein, for every day during the time thus *totally disabled* (Sundays and legal holidays excepted), upon complying with the regulations for the establishment of claims announced in the constitution and orders heretofore promulgated. Allowances cannot be made where the disablement does not cause *total* inability to labor.

Sundays and holidays not included in allowances.

6. It is the duty of each and every member abstaining from labor on account of physical disability to perform his work, to immediately inform his timekeeper or other person designated to receive such reports.

Reports of disability.

The Association is bound to the payment of allowances only when the disablement is thus reported; and no claim that has not been so reported will be considered.

Payments made only when disability is reported.

It is also the duty of every one having control of men, to report to the Secretary of the Association with the utmost promptness, each case of accidental injury or sickness or death occurring among the members. At the same time they must send duplicates of such notifications to the nearest medical inspector, through the head of department, or those designated by him, whereby examination of the claims will be greatly facilitated.

Allowances will in no case antedate such notification.

7. It is incumbent upon every member entitled to allowance from the Association to see that his claim is prepared in due form and forwarded to the nearest medical inspector or the secretary at Baltimore.

Claims to be forwarded only after being perfected.

The receipt attached to the certificate of disablement should in each case be signed before it is forwarded to the secretary, in order to obviate inconvenience and delay in afterwards procuring such signature.

8. The counter-signature of a higher official than the one certifying to the disablement is required in every case where the certifying official is not above the rank of a supervisor. The official signing such a certificate of disablement must have personal knowledge of the facts therein stated, or, at least, satisfy himself of their correctness before certifying; being held responsible for the consequences of such certification.

Certification.

9. Under the terms of the constitution of the Association no claim for *death* allowance, either accidental or natural, can be entertained or allowed, unless it be established to the satisfaction of the committee that the member, at the time of death, or at the time of receiving the injury or incurring the sickness causing death, was in the service of the Baltimore & Ohio Company.

Death allowance—when made.

A member of the Association leaving the service of the company, while he is undergoing injury or sickness, for which

Members leaving company's ser-

vice — to
what en-
titled.

allowance is made, is still entitled to continuance of the same as provided for in the constitution and for the period therein stipulated.

When
claims will
be paid.

10. Vouchers for money due by the Association will only be issued once a month, on the following dates:—

On Main
Stem and
branches.

In payment of all claims originating on the main stem and branches, received at the office of the Association in Baltimore, in proper shape for settlement, on or before the tenth day of each month, vouchers will *only* be issued on the 20th of the same month (on the 21st in case the 20th be Sunday).

On Pitts-
burgh and
Trans-Ohio
Divisions.

For all claims originating on the Pittsburgh division and Trans-Ohio divisions, received at the office of the association in Baltimore, in proper shape for settlement, on or before the last day of each month, vouchers will *only* be issued on the 10th of the succeeding month (on the 11th in case the 10th be Sunday).

To enable the management to carry out this programme effectively, it is absolutely essential that all parties use the utmost diligence in preparing and forwarding claims as promptly as practicable.

Members
notified
when vouch-
ers issue.

Each member entitled to allowance will be notified to whose care the voucher issued in settlement thereof has been sent. Those to whom such vouchers are sent will be held responsible for their prompt and safe delivery to their owners. Should a voucher be lost, no duplicate will be issued for sixty days, and no original voucher presented for payment *after* sixty days have elapsed from its date must be paid, until it is ascertained from the Secretary of the Association that no duplicate has been issued.

Allowances
made only
upon final
certificate
by inspec-
tors.

11. It is the province of the medical inspectors to decide when a member is unfit for duty, and the payment of sick or accident allowance is usually made dependent upon their favorable report. No allowance will be paid a member after the date fixed by the inspector for his return to duty, unless unforeseen circumstances render it clearly impracticable for him to obey the direction, which must be clearly shown before further payment will be made.

Medical at-
tendance —
when fur-
nished.

12. Medical attendance is only furnished at the expense of the Association in cases of disablement from injury received from accident occurring in the discharge of duty. It is not made compulsory upon a member to secure the services of a physician simply for the purpose of signing the certificate required to perfect his claim. If the Association is promptly notified of the sickness, one of its inspectors will at once look into the case, and inspectors are authorized to sign all certificates in lieu of physicians.

Surrender
of certifi-
cate of mem-
bership.

13. Every member leaving the service must surrender his certificate of membership to the official paying him, who will indorse upon its back, over his signature, the cause of leaving

the service and the amount of premium returned to the member.

14. Any employee discharged or leaving the company's service, must, on re-entering the same, make application for membership in the Association, without reference to previous employment.

Applications for membership.

15. Attention is called to Article XI. of the constitution, which provides that "the monthly payment shall in all cases be deducted from the wages of the members; when there are no wages, no payments can be made." In explanation of this provision it may be stated that premiums are *only* deducted from the *wages* of members, and that when, through *sickness* or *accident*, absence with leave, or suspension, they have earned no wages, no premium is expected from them.

When premiums are to be paid.

ARTICLE V. of the constitution provides that when a contributor shall be disabled by sickness or accident from earning any wages, and it shall be so certified by a surgeon employed by the society, he shall, notwithstanding, be entitled to the benefits of this society for one month after the time for which his contributions have been paid, and also for a period extending from the day he resumes labor to the first subsequent payment of wages.

In other words, though *sickness* or *accident* prevent a member from earning wages and paying his premium, he is not to be thereby debarred from the benefits of the Association *from the time he does resume work to the time he again commences paying premiums*; but, without charge for back insurance, is entitled to all benefits between the time of such resumption of work and the time he again commences paying premiums in advance from wages earned.

It being a recognized fact, that in severe cases of injury, hospitals offer better facilities for securing speedy recovery than can be had elsewhere, the management in the interest of those members of the Association who may meet with accidents whilst in the discharge of duty, and may prefer hospital treatment, have made special arrangements with prominent hospitals in Chicago, Columbus, Wheeling, Pittsburgh, and Baltimore, for *boarding* and attending those so disabled, who will thereby secure to themselves the advantages of the best surgical treatment and appliances, careful nursing and all the comforts of a home. Under this arrangement the Association is to pay for the medical attendance and the member for his board — which latter, in no event, need exceed \$2.50 per week and which can be paid out of his allowance from the Association.

Hospital treatment for members.

The management reserves to itself the power of approving or declining each application for this privilege.

All requests for admission to hospitals will be addressed to the Secretary of the Association.

PART II.

TIME AND WAGES.

PART II.

TIME AND WAGES.

The returns for the tenth census of the United States, for the State of Massachusetts, which were used in preparing the census abstract recently issued by this bureau as a supplement to its thirteenth annual report, also supplied the material requisite for this Part, relative to Time and Wages, and Part III., which considers Profits and Earnings.

The United States census schedules used in collecting the products of industry, whether by enumerators or special agents, required the following information: Average number of hands employed, designating separately males above sixteen years of age, females above fifteen, and children and youth; regarding hours of labor, the number of hours in the ordinary day of labor from May to November, and from November to May; concerning wages, the average day's wages in each establishment for a skilled mechanic and an ordinary laborer, and the total amount paid in wages during the year; the number of months each establishment was in operation was called for, with detailed information as to the number of months run on full time, three-quarters time, two-thirds time, half time, and the number of months idle.

These points, which were carefully and very fully gathered, taken in conjunction with the statistics of capital invested, and values of stock used and product,—that is, value of goods made, including jobbing and repairing,—supplied the material for a scientific presentation of time employed and average day's wages paid to employes, the average yearly earnings of employes, the gross profits of manufacturers,

and, on a fair basis, the estimated net profits of manufacturers.

This Part is devoted to the statistics of Time and Wages. The unit is the establishment, but no establishment is included in this presentation unless the wages paid therein during the census year amounted to at least \$5,000. Owing to lack of space principally, we present in print the facts for but 2,440 individual establishments, this number being 67+ per cent of 3,663, the whole number of manufacturing and mechanical establishments of which each paid out during the census year at least \$5,000 in wages. The whole number of establishments in the State being 14,560, it will be seen that 10,897, or very nearly 75 per cent, paid out less than \$5,000 each in wages during the census year, while 25 per cent paid \$5,000 or more.

Each of the 2,440 returns used was complete in those details which form a perfect industrial presentation. The establishments were selected at random throughout the State, and every precaution taken to avoid the identification of individual establishments. The manner of presentation was submitted to Gen. F. A. Walker, the former superintendent of the United States census, and was approved by him.

Twenty-one industries are comprehended in this presentation. These twenty-one industries are carried on in 11,859 establishments, or 80+ per cent of the 14,560 returned by the census as engaged in manufacturing industries. The 2,440 establishments considered form 20+ per cent of the 11,859 in the twenty-one industries.

The 289,810 employés in these twenty-one industries, form 82+ per cent of 352,516, the number engaged in all manufacturing industries in the State. The 2,440 establishments represent 207,793 employés, or 71+ per cent of the whole number engaged in the twenty-one industries, and 58+ per cent of the number in all industries in the State.

The comparative number of establishments and employés in each of the industries in the State and in the 2,440 establishments considered, is shown in the following table:—

INDUSTRIES.	NUMBER OF ESTABLISHMENTS.		NUMBER OF EMPLOYEES.	
	In the State.	Used in this Presentation.	In the State.	In the Establishments used in this Presentation.
Boots and shoes, . . .	1,532	460	65,552	37,657
Boxes,	174	30	2,228	775
Brick,	112	20	2,254	1,135
Building,	2,075	240	13,681	5,645
Carriages and wagons, .	676	90	3,761	1,962
Clothing,	558	160	19,214	11,435
Cotton goods,	190	150	61,617	59,684
Food preparations, . .	1,107	70	6,652	2,901
Furniture,	461	100	7,445	3,133
Leather,	592	160	8,863	6,703
Machines and machinery,	469	150	14,263	11,580
Metals and metallic goods,	2,045	270	24,621	18,249
Musical instruments, .	86	40	3,111	2,821
Paper,	126	70	8,375	6,354
Printing and publishing, .	411	100	7,413	5,227
Rubber and elastic goods,	27	25	3,494	2,644
Stone,	232	40	2,451	1,370
Tobacco,	277	30	1,445	905
Wooden goods,	457	70	4,773	2,534
Woollen goods,	236	150	26,109	22,597
Worsted goods,	16	15	2,488	2,482
Totals,	11,859	2,440	289,810	207,793

We first present the showing by individual establishments under an industry classification. The numbers denoting each establishment, as, for instance, "No. 310" under "Boots and Shoes," enable a direct reference to Part III. where the statistics for profits and earnings, for the same establishment, can be found. In this way, by joining the two presentations, the complete statistical unity of each establishment is secured.

BOOTS AND SHOES.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 1	275	\$2 50	\$1 50	10	10	10	10	10	-	-	-	2
2	43	2 50	1 50	10	10	10	11	11	-	-	-	1
3	22	2 00	1 50	10	10	10	11	11	-	-	-	1
4	26	2 25	1 50	10	9	9 $\frac{1}{2}$	11	11	-	-	-	1
5	32	2 25	1 50	10	10	10	8	8	-	-	-	4
6	125	-	50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
7	125	-	50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
8	18	1 75	1 25	10	10	10	12	12	-	-	-	-
9	31	2 25	1 50	11	10	10 $\frac{1}{2}$	9	9	-	-	-	3
10	95	2 00	1 25	10	10	10	9	9	-	-	-	3
11	46	2 25	1 50	10	10	10	11	11	-	-	-	1
12	52	2 25	1 50	10	10	10	10	10	-	-	-	2
13	17	1 75	1 25	10	10	10	12	12	-	-	-	-
14	20	2 00	1 25	10	10	10	8	8	-	-	-	4
15	55	2 50	1 50	10	10	10	7	7	-	-	-	5
16	20	2 25	1 75	10	10	10	8	8	-	-	-	4
17	20	1 75	1 25	10	10	10	8	8	-	-	-	4
18	53	2 00	1 50	10	10	10	10	10	-	-	-	2
19	125	2 00	1 50	10	9	9 $\frac{1}{2}$	8	8	-	-	-	4
20	143	2 50	1 50	10	8	9	8	8	-	-	-	4
21	18	2 50	1 50	10	9	9 $\frac{1}{2}$	10	8	2	-	-	2
22	270	2 30	1 50	10	9	9 $\frac{1}{2}$	10	10	-	-	-	2
23	288	2 75	1 75	10	9	9 $\frac{1}{2}$	11	8	2	-	1	1
24	250	2 50	1 50	10	9	9 $\frac{1}{2}$	10	8	2	-	-	2
25	80	2 75	1 50	10	10	10	8	8	-	-	-	4
26	175	2 00	1 50	10	10	10	9	9	-	-	-	3
27	155	2 50	1 50	10	10	10	10	10	-	-	-	2
28	140	2 50	1 50	10	10	10	10	10	-	-	-	2
29	250	2 50	1 50	10	10	10	10	10	-	-	-	2
30	300	2 50	1 50	10	10	10	10	10	-	-	-	2
31	23	1 20	-	10	10	10	12	12	-	-	-	-
32	115	2 25	1 00	10	10	10	11	11	-	-	-	1
33	257	2 25	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
34	110	2 25	1 00	10	10	10	11	11	-	-	-	1
35	125	2 00	1 25	10	10	10	12	12	-	-	-	-
36	115	2 25	1 00	10	10	10	12	11	-	-	1	-
37	500	2 25	1 25	10	10	10	12	12	-	-	-	-
38	100	2 25	75	10	10	10	5	5	-	-	-	7
39	150	2 00	1 25	10	10	10	12	12	-	-	-	-
40	200	2 50	1 25	10	10	10	12	11	-	-	1	-
41	242	2 50	1 50	10	10	10	12	12	-	-	-	-
42	80	2 00	1 00	10	10	10	11	10	-	-	1	1
43	45	2 00	1 25	10	10	10	12	12	-	-	-	-
44	346	2 25	1 50	10	10	10	11	8	2	-	1	1
45	36	2 50	1 50	10	10	10	12	10	-	-	2	-
46	100	2 50	1 25	10	10	10	10	8	-	-	2	2
47	400	2 50	1 00	10	10	10	12	12	-	-	-	-
48	175	2 00	75	10	10	10	12	10	1	-	1	-
49	99	2 50	2 00	10	10	10	10	10	-	-	-	2
50	80	2 00	1 50	10	10	10	9	9	-	-	-	3
51	37	2 50	1 50	10	10	10	11	9	-	-	2	1
52	99	2 25	1 50	10	10	10	9	9	-	-	-	3
53	40	2 50	1 75	10	10	10	9	9	-	-	-	3
54	35	1 40	1 00	10	10	10	9	9	-	-	-	3
55	110	2 50	1 50	10	10	10	9	9	-	-	-	3
56	225	2 75	1 25	10	10	10	12	12	-	-	-	-
57	210	2 50	2 00	10	10	10	11	11	-	-	-	1
58	50	2 50	2 00	10	10	10	12	11	-	-	1	-
59	75	2 50	1 75	10	10	10	11	11	-	-	-	1
60	40	2 25	1 50	10	10	10	10	10	-	-	-	2

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 61	80	\$2 50	\$1 75	10	10	10	10	10	-	-	-	2
62	35	2 25	1 75	10	10	10	10	10	-	-	-	2
63	21	2 25	1 50	10	10	10	10	10	-	-	-	2
64	24	2 00	1 50	10	10	10	12	12	-	-	-	-
65	21	1 50	1 00	10	10	10	10	10	-	-	-	2
66	15	2 50	1 75	10	8	9	10	10	-	-	-	2
67	40	2 25	1 00	10	8	9	12	12	-	-	-	-
68	28	2 75	1 50	10	10	10	3	3	-	-	-	9
69	31	2 50	1 75	10	10	10	10	10	-	-	-	2
70	85	2 50	1 50	10	10	10	10	10	-	-	-	2
71	42	2 00	1 25	10	10	10	10	10	-	-	-	2
72	25	1 70	1 00	10	10	10	12	12	-	-	-	-
73	42	-	1 00	10	10	10	12	12	-	-	-	-
74	30	1 50	1 00	10	8	9	12	12	-	-	-	-
75	290	2 50	1 50	10	10	10	5	5	-	-	-	7
76	14	2 00	1 50	10	10	10	12	12	-	-	-	-
77	20	2 75	1 00	10	10	10	12	12	-	-	-	-
78	23	1 90	1 40	10	10	10	9	9	-	-	-	3
79	20	2 00	1 00	10	10	10	12	9	-	-	3	-
80	33	3 00	1 25	10	10	10	12	10	-	-	2	-
81	37	2 00	1 25	9	9	9	9	9	-	-	-	3
82	20	2 00	1 25	10	10	10	9	9	-	-	-	3
83	92	2 50	1 25	10	10	10	11	8	2	-	1	1
84	15	1 50	1 25	8	8	8	12	8	-	-	4	-
85	25	1 75	1 40	10	10	10	9	9	-	-	-	3
86	84	2 25	1 25	10	10	10	10	10	-	-	-	2
87	36	2 25	1 25	10	10	10	11	8	1	-	2	1
88	29	2 00	1 25	10	10	10	8	8	-	-	-	4
89	65	2 25	1 50	9	9	9	11	10	1	-	-	1
90	23	1 80	1 50	10	10	10	11	11	-	-	-	1
91	41	2 00	1 50	10	10	10	12	12	-	-	-	-
92	34	2 00	1 50	10	10	10	10	10	-	-	-	2
93	130	2 25	1 25	10	10	10	12	8	2	-	2	-
94	135	2 00	1 25	10	10	10	12	10	1	-	1	-
95	56	2 25	1 25	10	10	10	12	12	-	-	-	-
96	38	2 00	1 25	10	10	10	10	10	-	-	-	2
97	48	2 25	1 25	10	10	10	12	12	-	-	-	-
98	13	1 75	1 25	10	10	10	12	9	3	-	-	-
99	12	2 00	1 50	10	8	9	12	10	2	-	-	-
100	57	2 25	1 50	10	10	10	12	8	4	-	-	-
101	329	2 25	1 75	10	10	10	10	10	-	-	-	2
102	25	2 25	1 50	10	10	10	7	7	-	-	-	5
103	45	2 25	1 50	10	10	10	9	9	-	-	-	3
104	35	2 25	1 50	10	10	10	8	8	-	-	-	4
105	100	2 25	1 75	10	10	10	10	10	-	-	-	2
106	40	1 50	1 00	10	10	10	12	12	-	-	-	-
107	100	2 50	75	10	9	9 $\frac{1}{2}$	11	11	-	-	-	1
108	150	2 50	75	10	10	10	12	12	-	-	-	-
109	23	2 00	1 50	10	10	10	12	12	-	-	-	-
110	15	2 00	1 50	10	10	10	12	12	-	-	-	-
111	70	1 75	1 00	10	10	10	12	12	-	-	-	-
112	12	2 50	1 50	10	10	10	12	12	-	-	-	-
113	260	2 00	1 37	10	10	10	12	10	1	-	1	-
114	120	2 00	1 25	10	10	10	9	9	-	-	-	3
115	125	1 75	1 00	10	10	10	10	10	-	-	-	2
116	200	2 50	90	10	10	10	12	12	-	-	-	-
117	26	2 00	1 50	10	10	10	4	4	-	-	-	8
118	75	2 50	1 50	10	10	10	11	11	-	-	-	1
119	102	2 00	1 50	10	10	10	12	9	1	-	2	-
120	86	2 00	1 50	10	10	10	12	10	1	-	1	-

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 121	73	\$2 25	\$1 50	10	10	10	12	11	-	-	1	-
122	118	2 00	1 25	10	10	10	12	12	-	-	-	-
123	57	1 50	1 00	10	10	10	10	8	2	-	-	2
124	13	2 00	1 25	10	10	10	10	10	-	-	-	2
125	70	2 50	1 75	10	10	10	11	11	-	-	-	1
126	77	2 00	1 25	10	10	10	12	12	-	-	-	-
127	50	2 25	1 75	10	10	10	12	8	2	-	2	-
128	72	2 00	1 50	10	10	10	12	12	-	-	-	-
129	150	2 50	2 00	10	10	10	12	8	-	-	4	-
130	108	2 25	1 25	10	10	10	12	10	2	-	-	-
131	32	1 75	1 00	10	10	10	12	10	-	-	2	-
132	60	1 75	1 00	10	10	10	8	8	-	-	-	4
133	250	1 75	1 25	10	10	10	12	8	2	-	2	-
134	27	2 00	1 75	10	8	9	12	9	2	-	1	-
135	143	2 75	2 00	10	10	10	12	8	2	-	2	-
136	50	2 00	1 00	10	10	10	12	8	2	-	2	-
137	360	2 75	1 00	10	10	10	12	8	4	-	-	-
138	76	2 00	1 50	10	10	10	12	7	3	-	2	-
139	62	2 00	1 25	10	10	10	12	10	-	-	2	-
140	31	1 75	1 00	8	8	8	12	12	-	-	-	-
141	20	2 50	1 50	10	10	10	12	12	-	-	-	-
142	100	1 50	75	10	10	10	12	12	-	-	-	-
143	75	1 50	1 00	10	10	10	12	12	-	-	-	-
144	85	2 25	1 50	10	10	10	12	12	-	-	-	-
145	14	2 00	1 25	10	10	10	12	12	-	-	-	-
146	16	1 75	1 00	10	10	10	12	10	1	-	1	-
147	35	1 75	75	10	10	10	12	12	-	-	-	-
148	17	1 50	1 00	10	10	10	12	12	-	-	-	-
149	56	1 75	1 15	9	9	9	10	10	-	-	-	2
150	40	1 25	75	10	10	10	10	9	-	-	1	2
151	60	2 50	1 25	10	10	10	12	12	-	-	-	-
152	75	1 50	1 00	10	10	10	8	8	-	-	-	4
153	35	2 00	1 00	10	10	10	10	10	-	-	-	2
154	300	2 50	1 50	10	10	10	12	8	-	-	4	-
155	91	2 16	1 25	10	10	10	12	6	2	-	4	-
156	60	3 00	1 50	10	10	10	12	8	-	-	4	-
157	200	2 50	75	10	10	10	10	6	2	-	2	2
158	33	2 00	1 00	10	10	10	12	8	-	-	4	-
159	40	1 50	1 25	9	9	9	10	7	3	-	-	2
160	105	2 50	1 00	10	10	10	11	7	3	-	1	1
161	18	2 50	1 67	10	8	9	12	6	-	-	6	-
162	53	2 50	1 25	10	10	10	12	8	-	-	4	-
163	50	2 50	1 00	10	10	10	12	8	-	-	4	-
164	30	2 50	1 50	10	10	10	12	8	2	-	2	-
165	17	1 50	1 00	10	10	10	12	12	-	-	-	-
166	17	1 50	1 00	10	10	10	12	12	-	-	-	-
167	60	2 00	1 25	10	10	10	10	10	-	-	-	2
168	100	1 25	75	10	10	10	12	9	3	-	-	-
169	140	2 25	1 50	10	10	10	12	8	2	-	2	-
170	40	2 50	1 50	10	10	10	11	8	-	-	3	1
171	13	2 00	1 50	10	10	10	12	8	4	-	-	-
172	50	2 00	1 25	10	10	10	9	9	-	-	-	3
173	25	2 50	1 50	10	10	10	12	12	-	-	-	-
174	35	2 00	1 50	10	10	10	12	9	-	-	3	-
175	73	2 50	1 50	10	10	10	9	9	-	-	-	3
176	75	1 75	1 25	10	10	10	10	10	-	-	-	2
177	150	2 00	1 00	10	10	10	12	7	3	-	2	-
178	13	2 00	1 25	10	10	10	12	6	-	-	6	-
179	151	2 00	1 00	10	10	10	12	7	-	-	5	-
180	114	2 00	1 00	10	10	10	12	12	-	-	-	-

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 181	240	\$2 25	\$1 00	10	10	10	12	12	-	-	-	-
182	53	2 50	1 50	10	10	10	10	8	-	-	2	2
183	30	2 50	1 75	10	10	15	12	6	-	-	6	-
184	100	2 50	1 00	10	10	10	12	8	$\frac{1}{4}$	-	-	-
185	111	1 75	75	10	10	10	12	12	-	-	-	-
186	27	2 50	1 00	10	10	10	12	12	-	-	-	-
187	355	1 75	1 10	10	10	10	12	9	3	-	-	-
188	20	3 00	2 00	10	10	10	10	10	-	-	-	2
189	25	2 00	1 00	10	10	10	12	8	-	-	4	-
190	60	2 50	1 00	10	10	10	12	8	2	-	2	-
191	222	1 75	50	10	10	10	12	12	-	-	-	-
192	74	3 00	1 50	10	10	10	8	8	-	-	-	4
193	28	2 25	1 50	10	10	10	12	11	-	-	1	-
194	75	2 50	1 50	10	10	10	10	10	-	-	-	2
195	105	2 25	1 50	10	10	10	12	8	2	-	2	-
196	115	1 85	1 25	10	10	10	12	12	-	-	-	-
197	80	2 50	1 25	10	10	10	12	10	2	-	-	-
198	110	1 50	1 25	10	10	10	10	10	-	-	-	2
199	106	1 75	1 00	10	10	10	12	12	-	-	-	-
200	30	2 00	1 50	10	10	10	10	10	-	-	-	2
201	21	2 00	1 50	10	10	10	12	6	-	-	6	-
202	217	2 00	1 50	10	10	10	10	6	-	-	4	2
203	13	1 75	1 50	10	10	10	12	6	6	-	-	-
204	25	2 00	1 25	10	10	10	12	6	-	-	6	-
205	100	2 50	1 50	10	10	10	12	12	-	-	-	-
206	29	3 00	1 25	10	10	10	12	10	-	-	2	-
207	133	2 25	1 00	10	10	10	12	9	-	-	3	-
208	35	2 00	1 00	10	10	10	12	8	-	-	4	-
209	18	1 25	1 00	10	10	10	12	10	-	-	2	-
210	80	2 50	1 50	10	10	10	10	10	-	-	-	2
211	39	2 50	1 00	10	10	10	12	12	-	-	-	-
212	39	2 50	1 00	10	10	10	11	9	-	-	2	1
213	150	2 50	1 00	10	10	10	11	11	-	-	-	1
214	100	2 00	1 00	10	10	10	12	9	3	-	-	-
215	240	2 25	1 00	10	10	10	12	12	-	-	-	-
216	60	2 00	1 00	10	10	10	12	12	-	-	-	-
217	250	2 50	50	10	10	10	12	12	-	-	-	-
218	115	2 00	1 00	10	10	10	9	9	-	-	-	3
219	44	2 50	1 25	10	10	10	12	12	-	-	-	-
220	100	2 50	1 00	10	10	10	12	12	-	-	-	-
221	50	2 00	1 25	10	10	10	12	9	-	-	3	-
222	40	2 50	1 50	10	10	10	12	8	-	-	4	-
223	16	2 00	1 25	10	10	10	12	12	-	-	-	-
224	50	2 25	1 00	10	10	10	12	10	-	-	2	-
225	16	2 00	1 25	10	10	10	12	8	-	-	4	-
226	42	2 50	1 00	10	10	10	8	8	-	-	-	4
227	75	2 00	1 75	10	10	10	12	12	-	-	-	-
228	32	2 00	1 25	10	10	10	12	12	-	-	-	-
229	80	2 00	1 25	10	10	10	12	10	1	-	1	-
230	33	2 50	1 50	10	10	10	10	8	-	-	2	2
231	80	2 00	1 00	10	10	10	12	8	-	-	4	-
232	87	2 00	1 60	10	10	10	12	8	4	-	-	-
233	105	2 25	1 00	10	10	10	12	12	-	-	-	-
234	31	2 50	1 00	10	10	10	10	6	4	-	-	2
235	250	2 50	1 00	10	10	10	10	10	-	-	-	2
236	17	3 00	1 50	10	10	10	12	12	-	-	-	-
237	12	3 00	1 50	10	10	10	12	12	-	-	-	-
238	13	2 00	1 50	10	10	10	12	12	-	-	-	-
239	9	2 50	1 75	10	10	10	12	12	-	-	-	-
240	43	2 00	1 50	10	10	10	12	12	-	-	-	-

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
241	98	\$1 50	\$0 75	10	10	10	12	12	-	-	-	-
242	27	1 00	75	10	10	10	12	12	-	-	-	-
243	36	1 75	1 00	10	8	9	10	10	-	-	-	2
244	25	3 00	1 50	10	10	10	12	7	3	-	2	-
245	85	3 00	1 50	10	10	10	12	9	-	-	3	-
246	36	2 00	1 33	10	10	10	9	9	-	-	-	3
247	50	2 50	1 50	10	10	10	12	12	-	-	-	-
248	25	2 50	1 00	10	10	10	12	12	-	-	-	-
249	170	3 00	1 00	10	10	10	12	8	2	-	2	-
250	300	3 00	1 75	10	10	10	12	5	2	-	5	-
251	500	2 50	1 25	10	10	10	12	8	2	-	2	-
252	375	2 50	1 50	10	10	10	12	5	2	-	5	-
253	270	2 50	1 00	10	10	10	12	7	3	-	2	-
254	300	2 50	1 50	10	10	10	12	8	2	-	2	-
255	25	1 25	75	10	10	10	12	8	4	-	-	-
256	80	2 25	1 25	9	9	9	12	3	6	-	3	-
257	50	3 00	2 00	10	10	10	12	8	-	-	4	-
258	25	2 50	2 00	10	10	10	12	3	6	-	3	-
259	35	2 50	1 50	10	10	10	8	8	-	-	-	4
260	25	2 50	2 00	10	10	10	12	-	12	-	-	-
261	50	3 00	1 50	10	10	10	12	12	-	-	-	-
262	20	1 50	1 00	10	10	10	12	12	-	-	-	-
263	27	1 50	1 00	10	10	10	12	12	-	-	-	-
264	40	2 00	1 00	10	10	10	12	7	-	-	5	-
265	17	2 50	1 00	10	10	10	12	7	3	-	2	-
266	20	1 50	1 00	10	10	10	10	10	-	-	-	2
267	100	3 00	2 00	10	10	10	12	6	3	-	3	-
268	53	2 50	1 00	10	10	10	12	12	-	-	-	-
269	30	2 00	1 00	10	10	10	12	8	-	-	4	-
270	31	3 00	1 00	10	10	10	12	12	-	-	-	-
271	30	2 50	1 00	10	10	10	10	10	-	-	-	2
272	20	2 50	1 62	10	10	10	11	8	1	-	2	1
273	150	3 00	1 50	10	10	10	12	8	2	-	2	-
274	90	3 00	1 50	10	10	10	12	9	-	-	3	-
275	75	3 00	1 00	10	10	10	12	7	-	-	5	-
276	85	3 00	1 00	10	10	10	12	12	-	-	-	-
277	41	2 00	1 00	10	10	10	12	12	-	-	-	-
278	20	2 50	1 75	10	10	10	12	10	-	-	2	-
279	23	2 60	1 50	10	10	10	11	11	-	-	-	1
280	27	2 00	1 25	10	10	10	9	9	-	-	-	3
281	35	2 00	1 50	10	10	10	12	12	-	-	-	-
282	33	2 50	1 50	10	10	10	9	9	-	-	-	3
283	15	2 50	1 75	10	10	10	8	8	-	-	-	4
284	19	2 00	1 50	10	10	10	8	8	-	-	-	4
285	75	2 50	1 50	10	10	10	12	12	-	-	-	-
286	27	2 00	1 00	10	10	10	10	10	-	-	-	2
287	20	2 00	1 50	10	10	10	12	12	-	-	-	-
288	35	2 00	1 00	10	10	10	12	12	-	-	-	-
289	25	2 00	1 50	10	10	10	8	8	-	-	-	4
290	30	2 50	1 00	10	10	10	12	12	-	-	-	-
291	150	2 75	1 40	10	10	10	11	10	-	-	1	1
292	35	2 00	1 00	10	10	10	12	10	-	-	2	-
293	65	2 00	1 00	10	10	10	12	12	-	-	-	-
294	32	2 50	1 50	10	10	10	12	12	-	-	-	-
295	83	2 50	1 50	10	10	10	12	12	-	-	-	-
296	25	1 75	1 00	10	10	10	7	7	-	-	-	5
297	200	2 00	1 50	10	10	10	12	12	-	-	-	-
298	30	2 00	1 50	10	10	10	12	12	-	-	-	-
299	60	2 00	1 25	10	10	10	12	12	-	-	-	-
300	30	2 00	1 00	10	10	10	12	8	-	-	4	-

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average		Full time.	³ / ₄ time.	² / ₃ time.	¹ / ₂ time.	Idle.
No. 301	50	\$2 00	\$1 00	10	10	10	12	12	-	-	-	-
302	108	2 00	1 50	10	10	10	12	8	4	-	-	-
303	70	2 00	1 50	10	10	10	12	6	2	-	4	-
304	200	2 00	1 00	10	10	10	10	10	-	-	-	2
305	59	2 00	1 50	10	10	10	12	12	-	-	-	-
306	12	2 00	1 50	10	10	10	12	8	-	-	4	-
307	216	2 75	1 00	10	10	10	12	9	2	-	1	-
308	90	3 00	1 50	10	10	10	12	10	-	-	2	-
309	90	3 00	1 00	10	10	10	12	12	-	-	-	-
310	20	2 50	1 50	10	10	10	8	8	-	-	-	4
311	15	2 00	1 50	10	10	10	8	8	-	-	-	4
312	100	3 00	1 50	10	10	10	12	12	-	-	-	-
313	85	3 00	1 50	10	10	10	12	12	-	-	-	-
314	170	2 75	1 50	10	10	10	12	12	-	-	-	-
315	20	2 50	1 00	10	10	10	12	12	-	-	-	-
316	150	3 00	1 00	10	10	10	12	8	4	-	-	-
317	110	2 50	1 00	10	10	10	12	12	-	-	-	-
318	145	2 75	1 75	10	10	10	12	9	-	-	3	-
319	350	3 00	1 00	10	10	10	12	10	-	-	2	-
320	150	2 50	1 75	10	10	10	12	12	-	-	-	-
321	40	2 50	1 50	10	10	10	12	12	-	-	-	-
322	12	2 00	1 50	10	10	10	12	12	-	-	-	-
323	16	2 50	1 50	10	10	10	12	12	-	-	-	-
324	100	2 50	1 25	10	10	10	12	8	-	-	4	-
325	75	2 50	1 25	10	10	10	11	11	-	-	-	1
326	61	2 00	1 00	10	10	10	10	10	-	-	-	2
327	100	2 50	1 50	10	10	10	12	5	-	-	7	-
328	250	2 00	1 25	10	10	10	12	10	-	-	2	-
329	600	2 50	1 50	10	10	10	12	9	2	-	1	-
330	150	2 50	1 50	10	10	10	12	8	4	-	-	-
331	175	2 50	1 50	10	10	10	12	8	4	-	-	-
332	150	2 50	1 50	10	10	10	12	8	4	-	-	-
333	125	2 50	1 25	10	10	10	12	8	4	-	-	-
334	300	2 50	1 25	10	10	10	12	8	4	-	-	-
335	210	3 00	1 50	10	10	10	12	6	3	-	3	-
336	92	2 00	1 00	10	10	10	12	12	-	-	-	-
337	35	2 00	1 00	10	10	10	12	12	-	-	-	-
338	26	2 00	1 25	10	10	10	12	12	-	-	-	-
339	37	3 00	2 00	10	10	10	12	12	-	-	-	-
340	15	2 00	1 00	10	10	10	12	12	-	-	-	-
341	26	3 00	1 00	10	10	10	12	12	-	-	-	-
342	65	2 50	1 25	10	10	10	12	5	2	-	5	-
343	75	3 00	1 25	10	10	10	12	10	2	-	-	-
344	34	3 00	1 25	10	10	10	11	8	-	-	3	1
345	160	2 00	1 25	10	10	10	12	12	-	-	-	-
346	25	2 00	1 50	10	10	10	10	10	-	-	-	2
347	14	2 25	1 00	10	10	10	12	12	-	-	-	-
348	25	2 25	1 00	10	10	10	12	12	-	-	-	-
349	40	2 50	1 00	10	10	10	12	12	-	-	-	-
350	260	2 50	1 50	10	10	10	12	9	-	-	3	-
351	50	2 75	1 00	10	10	10	12	12	-	-	-	-
352	75	2 50	1 00	10	10	10	12	12	-	-	-	-
353	34	2 50	1 00	10	10	10	12	12	-	-	-	-
354	18	2 50	1 25	10	10	10	12	12	-	-	-	-
355	12	2 50	2 00	10	10	10	12	12	-	-	-	-
356	14	2 00	1 50	10	10	10	12	12	-	-	-	-
357	8	2 50	1 50	10	10	10	12	12	-	-	-	-
358	35	1 90	1 00	10	10	10	12	12	-	-	-	-
359	55	2 00	1 00	10	10	10	12	12	-	-	-	-
360	20	2 50	2 00	10	10	10	11	6	-	3	2	1

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employees.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 361	20	\$2 00	\$1 00	10	10	10	12	12	-	-	-	-
362	30	1 75	1 25	10	10	10	12	12	-	-	-	-
363	41	1 50	1 00	10	10	10	12	12	-	-	-	-
364	20	2 00	1 50	10	10	10	12	12	-	-	-	-
365	18	2 50	1 00	10	10	10	12	12	-	-	-	-
366	16	2 00	1 25	10	10	10	12	10	2	-	-	-
367	55	2 00	1 00	9	9	9	12	12	-	-	-	-
368	133	2 50	1 00	10	10	10	12	12	-	-	-	-
369	40	2 00	1 25	10	10	10	12	10	2	-	-	-
370	32	2 25	1 25	10	10	10	11	10	-	-	1	1
371	25	2 50	1 00	10	10	10	12	-	-	-	12	-
372	22	2 50	1 25	10	10	10	10	10	-	-	-	2
373	50	2 50	1 50	10	10	10	12	10	-	-	2	-
374	43	2 25	1 00	10	10	10	12	12	-	-	-	-
375	100	3 00	1 50	10	10	10	8	8	-	-	-	4
376	300	3 00	1 25	10	10	10	12	9	1	-	2	-
377	30	1 66	1 00	10	8	9	10	6	2	-	2	2
378	240	3 00	1 00	10	10	10	12	12	-	-	-	-
379	60	2 25	1 00	10	10	10	12	8	-	-	4	-
380	17	2 00	1 25	10	10	10	12	10	-	-	2	-
381	33	2 00	1 25	10	10	10	10	10	-	-	-	2
382	12	2 25	1 50	10	10	10	12	12	-	-	-	-
383	305	2 00	1 00	10	10	10	12	9	2	-	1	-
384	100	2 50	1 00	10	10	10	12	8	3	-	-	-
385	75	1 75	75	8	10	9	12	8	-	-	4	-
386	40	2 50	75	10	10	10	12	8	-	-	4	-
387	30	1 66	83	10	10	10	12	8	-	-	4	-
388	18	1 50	80	10	10	10	9	9	-	-	-	3
389	150	2 50	80	10	10	10	8	8	-	-	-	4
390	53	2 25	50	10	10	10	10	10	-	-	-	2
391	45	2 25	1 00	10	10	10	12	12	-	-	-	-
392	40	2 00	1 50	10	10	10	10	10	-	-	-	2
393	40	2 25	1 25	10	10	10	10	10	-	-	-	2
394	50	2 25	1 50	10	10	10	11	8	3	-	-	1
395	123	2 00	1 25	10	10	10	10	10	-	-	-	2
396	11	1 25	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
397	38	2 00	75	10	9	9 $\frac{1}{2}$	10	10	-	-	-	2
398	367	2 75	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
399	64	2 00	1 00	10	10	10	12	12	-	-	-	-
400	276	2 00	75	10	10	10	12	12	-	-	-	-
401	75	2 50	1 25	10	10	10	6	6	-	-	-	6
402	30	1 50	75	10	10	10	10	10	-	-	-	2
403	80	1 50	75	10	10	10	12	12	-	-	-	-
404	20	1 25	75	10	10	10	12	12	-	-	-	-
405	22	1 50	1 00	10	10	10	12	9	-	-	3	-
406	263	2 00	1 00	10	10	10	12	12	-	-	-	-
407	200	3 00	1 00	9	9	9	11	11	-	-	-	1
408	64	2 00	1 50	10	10	10	10	10	-	-	-	2
409	20	2 00	1 00	10	10	10	12	12	-	-	-	-
410	70	2 00	1 00	10	10	10	11	11	-	-	-	1
411	50	2 25	1 00	10	10	10	12	12	-	-	-	-
412	40	1 00	-	10	10	10	12	12	-	-	-	-
413	18	2 50	2 00	10	10	10	12	12	-	-	-	-
414	44	1 75	1 00	10	10	10	11	11	-	-	-	1
415	75	1 00	87	10	10	10	10	8	-	-	2	2
416	64	1 50	1 25	10	10	10	12	8	2	-	2	-
417	25	1 75	1 00	9	8	8 $\frac{1}{2}$	10	10	-	-	-	2
418	105	2 00	1 00	10	10	10	12	12	-	-	-	-
419	125	2 00	1 00	10	10	10	12	12	-	-	-	-
420	52	2 50	1 00	10	10	10	12	8	2	-	2	-

BOOTS AND SHOES — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 421	16	\$3 00	\$1 00	10	10	10	10	10	-	-	-	2
422	25	2 00	1 00	10	10	10	8	8	-	-	-	4
423	175	2 50	1 12	10	10	10	11	8	2	-	1	1
424	42	2 50	1 10	10	10	10	11	10	-	-	1	1
425	27	2 50	1 25	10	10	10	11	10	-	-	1	1
426	28	2 00	1 00	10	10	10	12	10	1	-	1	-
427	30	2 50	1 00	10	10	10	12	9	3	-	-	-
428	42	2 50	1 00	10	10	10	8	8	-	-	-	4
429	15	2 00	1 00	10	10	10	6	6	-	-	-	6
430	76	2 50	1 67	10	10	10	12	12	-	-	-	-
431	25	1 50	1 00	10	10	10	12	12	-	-	-	-
432	175	2 50	75	10	10	10	9	9	-	-	-	3
433	55	2 00	1 00	10	10	10	12	12	-	-	-	-
434	35	-	50	10	8	9	12	12	-	-	-	-
435	100	2 25	1 00	10	10	10	12	12	-	-	-	-
436	175	2 00	1 37	10	10	10	8	8	-	-	-	4
437	18	2 50	1 75	9	9	9	12	12	-	-	-	-
438	54	2 25	1 00	10	10	10	12	12	-	-	-	-
439	26	2 00	1 00	8	8	8	11	5	4	2	-	1
440	40	1 67	1 25	10	10	10	12	9	-	-	3	-
441	30	2 00	1 00	8	8	8	5	5	-	-	-	7
442	18	2 00	1 25	10	10	10	9	7	-	-	2	3
443	150	2 75	2 00	10	10	10	12	12	-	-	-	-
444	15	2 50	1 50	10	10	10	12	9	-	-	3	-
445	23	3 00	80	9	8	8 $\frac{1}{2}$	12	12	-	-	-	-
446	175	2 00	1 37	10	10	10	11	6	2	2	1	1
447	18	2 50	1 75	9	9	9	12	12	-	-	-	-
448	45	1 33	75	8	8	8	12	12	-	-	-	-
449	50	1 00	75	10	10	10	12	6	6	-	-	-
450	46	1 00	50	10	10	10	12	12	-	-	-	-
451	14	2 75	1 12	10	10	10	12	12	-	-	-	-
452	35	1 50	1 00	10	10	10	12	12	-	-	-	-
453	8	3 00	1 67	10	10	10	12	12	-	-	-	-
454	24	2 00	1 00	10	10	10	12	12	-	-	-	-
455	30	2 50	1 00	9	9	9	12	6	-	4	2	-
456	20	-	87	10	10	10	12	12	-	-	-	-
457	16	1 50	1 00	10	10	10	12	12	-	-	-	-
458	16	2 50	-	10	10	10	12	12	-	-	-	-
459	20	2 00	-	10	10	10	12	9	-	3	-	-
460	13	2 50	1 50	10	10	10	12	12	-	-	-	-

BOXES.

No. 1	11	\$2 00	\$1 50	10	10	10	11	11	-	-	-	1
2	70	1 67	1 33	10	10	10	12	12	-	-	-	-
3	13	3 00	1 75	10	8	9	11	9	2	-	-	1
4	24	1 75	90	10	10	10	12	12	-	-	-	-
5	20	2 50	1 50	10	10	10	12	12	-	-	-	-
6	20	2 00	1 25	10	10	10	12	12	-	-	-	-
7	14	2 00	1 25	10	10	10	12	12	-	-	-	-
8	23	1 75	1 25	10	10	10	12	12	-	-	-	-
9	13	2 25	1 50	10	10	10	12	12	-	-	-	-
10	33	2 25	1 00	10	10	10	12	12	-	-	-	-

BOXES—Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 11	21	\$2 00	\$1 25	10	9	9 $\frac{1}{2}$	11	11	-	-	-	1
12	7	2 50	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
13	15	2 00	1 50	8	8	8	12	12	-	-	-	-
14	14	2 50	1 25	10	10	10	12	12	-	-	-	-
15	24	2 00	1 00	10	10	10	12	9	-	3	-	-
16	14	2 50	1 00	10	10	10	12	12	-	-	-	-
17	45	2 50	1 00	10	10	10	12	12	-	-	-	-
18	30	2 00	1 00	10	10	10	12	12	-	-	-	-
19	12	2 50	1 75	10	10	10	12	12	-	-	-	-
20	30	1 75	1 25	10	10	10	12	12	-	-	-	-
21	19	1 50	80	10	10	10	12	12	-	-	-	-
22	30	2 00	1 00	10	10	10	12	12	-	-	-	-
23	70	2 25	1 00	10	10	10	12	10	2	-	-	-
24	25	1 67	1 00	10	10	10	12	12	-	-	-	-
25	17	1 50	-	10	10	10	12	12	-	-	-	-
26	19	1 75	35	10	10	10	12	12	-	-	-	-
27	25	1 50	90	10	10	10	12	12	-	-	-	-
28	43	2 50	75	10	10	10	12	12	-	-	-	-
29	24	2 00	1 00	10	10	10	12	12	-	-	-	-
30	40	1 50	75	8	8	8	12	12	-	-	-	-

BRICK.

No. 1	31	\$1 50	\$1 25	12	12	12	6	6	-	-	-	6
2	37	2 00	1 00	12	12	12	6	6	-	-	-	6
3	80	1 50	1 00	12	12	12	6	6	-	-	-	6
4	185	2 25	84	10	8	9	12	4	6	-	2	-
5	275	1 75	1 00	12	10	11	12	4	8	-	-	-
6	30	2 00	1 25	12	9	10 $\frac{1}{2}$	6	6	-	-	-	6
7	40	2 00	1 50	12	10	11	5	5	-	-	-	7
8	25	2 25	1 25	12	10	11	6	6	-	-	-	6
9	12	1 60	1 25	10	10	10	12	12	-	-	-	-
10	40	2 00	1 20	10	8	9	10	6	4	-	-	2
11	40	2 00	1 00	10	9	9 $\frac{1}{2}$	6	6	-	-	-	6
12	60	3 00	1 50	10	10	10	7	7	-	-	-	5
13	40	1 25	-	10	10	10	12	12	-	-	-	-
14	22	2 00	1 00	10	10	10	6	6	-	-	-	6
15	35	1 40	-	10	10	10	7	7	-	-	-	5
16	60	2 50	1 50	10	10	10	12	12	-	-	-	-
17	14	1 87	1 37	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
18	30	1 50	1 00	10	10	10	8	5	-	-	3	4
19	20	2 50	1 65	10	10	10	5	5	-	-	-	7
20	59	3 50	1 25	10	10	10	6	6	-	-	-	6

BUILDING.

No. 1	25	\$2 25	\$1 25	10	10	10	9	9	-	-	-	3
2	7	2 00	1 75	10	8	9	12	9	1	2	-	-
3	85	2 00	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
4	10	2 00	-	10	10	10	12	12	-	-	-	-
5	22	2 00	1 50	10	10	10	12	12	-	-	-	-
6	12	2 25	2 00	10	9	9 $\frac{1}{2}$	9	6	-	-	3	3
7	18	2 00	1 00	10	10	10	12	12	-	-	-	-
8	22	2 00	1 37	10	9	9 $\frac{1}{2}$	9	3	6	-	-	3
9	19	2 50	1 50	10	8	9	9	9	-	-	-	3
10	10	2 50	1 50	10	8	9	12	12	-	-	-	-

BUILDING — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{1}{2}$ time.	$\frac{1}{4}$ time.	Idle.
11	8	\$2 50	\$1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
12	60	2 50	1 50	10	10	10	12	12	-	-	-	-
13	10	2 00	-	10	10	10	12	12	-	-	-	-
14	67	1 75	1 37	10	9	9 $\frac{1}{2}$	12	9	3	-	-	-
15	11	2 00	-	10	10	10	12	12	-	-	-	-
16	20	1 90	1 60	10	10	10	12	12	-	-	-	-
17	25	2 00	1 50	10	9	9 $\frac{1}{2}$	12	9	3	-	-	-
18	14	2 00	1 50	10	10	10	12	12	-	-	-	-
19	10	2 00	1 50	10	9	9 $\frac{1}{2}$	12	9	3	-	-	-
20	20	2 00	-	10	10	10	12	12	-	-	-	-
21	40	1 75	1 25	10	10	10	12	12	-	-	-	-
22	15	1 75	1 25	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
23	48	2 00	1 25	10	10	10	12	12	-	-	-	-
24	18	1 65	1 00	10	10	10	12	12	-	-	-	-
25	15	1 75	1 25	10	9	9 $\frac{1}{2}$	12	9	3	-	-	-
26	20	1 87	1 25	10	10	10	8	8	-	-	-	4
27	75	2 00	1 62	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
28	10	2 00	-	10	9	9 $\frac{1}{2}$	12	6	3	3	-	-
29	14	2 50	1 25	10	10	10	8	8	-	-	-	4
30	50	2 50	1 25	10	10	10	7	7	-	-	-	5
31	50	2 50	1 40	10	9	9 $\frac{1}{2}$	11	9	2	-	-	1
32	24	2 50	1 50	10	10	10	7	7	-	-	-	5
33	25	2 50	1 00	10	10	10	8	8	-	-	-	4
34	30	2 50	1 00	10	10	10	8	8	-	-	-	4
35	10	2 00	-	10	8	9	12	12	-	-	-	-
36	25	2 25	-	10	8	9	12	6	6	-	-	-
37	50	2 75	1 75	10	9	9 $\frac{1}{2}$	12	8	4	-	-	-
38	35	2 50	2 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
39	14	2 12	1 75	10	10	10	12	12	-	-	-	-
40	30	2 00	1 50	10	10	10	9	-	9	-	-	3
41	8	2 50	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
42	8	2 00	1 50	10	8	9	12	12	-	-	-	-
43	12	2 50	1 25	10	10	10	12	12	-	-	-	-
44	20	2 75	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
45	20	2 00	1 25	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
46	12	2 00	1 50	10	10	10	12	12	-	-	-	-
47	12	2 00	1 50	10	9	9 $\frac{1}{2}$	10	8	-	-	2	2
48	16	3 00	1 50	10	10	10	12	12	-	-	-	-
49	10	2 00	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
50	10	2 12	-	10	9	9 $\frac{1}{2}$	10	8	-	-	2	2
51	11	2 00	-	10	10	10	11	9	2	-	-	1
52	9	2 00	1 50	10	10	10	12	9	3	-	-	-
53	13	2 00	1 00	10	9	9 $\frac{1}{2}$	12	9	3	-	-	-
54	10	2 50	-	10	10	10	12	12	-	-	-	-
55	85	2 50	1 50	10	9	9 $\frac{1}{2}$	12	9	3	-	-	-
56	19	1 75	1 25	10	10	10	3	3	-	-	-	9
57	33	2 00	1 25	10	8	9	12	10	2	-	-	-
58	12	2 00	1 75	10	9	9 $\frac{1}{2}$	12	9	3	-	-	-
59	17	2 25	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
60	20	2 50	2 00	10	10	10	12	12	-	-	-	-
61	8	2 00	1 50	10	10	10	12	12	-	-	-	-
62	15	2 00	1 50	10	10	10	12	12	-	-	-	-
63	10	2 00	1 50	10	10	10	12	12	-	-	-	-
64	13	1 75	1 25	10	10	10	12	12	-	-	-	-
65	50	3 00	1 25	10	10	10	8	8	-	-	-	4
66	20	1 60	1 25	10	8	9	9	9	-	-	-	3
67	27	2 25	1 30	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
68	41	1 75	1 25	10	8	9	12	12	-	-	-	-
69	12	2 50	1 50	10	10	10	12	12	-	-	-	-
70	21	2 00	1 25	10	10	10	12	12	-	-	-	-

BUILDING — Continued.

ESTABLISHMENTS.	No.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
			Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
71	53	\$2 50	\$1 00	10	10	10	9	9	-	-	-	3	
72	18	2 25	1 50	10	10	10	12	12	-	-	-	-	
73	16	3 00	1 50	10	10	10	12	12	-	-	-	-	
74	37	2 50	1 50	10	10	10	12	12	-	-	-	-	
75	25	2 00	1 50	10	10	10	12	12	-	-	-	-	
76	20	2 50	1 75	10	9	9 $\frac{1}{2}$	6	6	-	-	-	-	6
77	10	2 00	-	10	10	10	12	12	-	-	-	-	
78	8	2 00	-	10	10	10	12	12	-	-	-	-	
79	12	2 37	50	10	10	10	12	12	-	-	-	-	
80	20	2 00	-	10	10	10	12	12	-	-	-	-	
81	16	2 00	1 75	10	10	10	12	12	-	-	-	-	
82	14	2 00	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-	
83	10	2 25	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-	
84	15	2 00	1 50	10	9	9 $\frac{1}{2}$	11	11	-	-	-	-	1
85	15	2 25	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-	
86	14	3 00	1 50	10	10	10	10	10	-	-	-	-	2
87	15	3 00	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-	
88	45	2 50	1 25	10	8	9	6	6	-	-	-	-	6
89	70	2 50	1 00	10	9	9 $\frac{1}{2}$	8	8	-	-	-	-	4
90	40	3 25	1 00	10	10	10	12	-	-	12	-	-	
91	20	1 50	1 00	10	10	10	12	12	-	-	-	-	
92	50	2 50	1 00	10	10	10	12	10	2	-	-	-	
93	12	2 00	1 25	10	10	10	12	12	-	-	-	-	
94	16	2 00	1 50	10	10	10	12	12	-	-	-	-	
95	28	1 75	1 00	10	9	9 $\frac{1}{2}$	8	8	-	-	-	-	4
96	10	2 50	1 50	10	8	9	10	6	-	-	4	2	
97	28	2 00	75	10	8	9	12	12	-	-	-	-	
98	15	2 50	1 50	10	8	9	10	7	-	-	3	2	
99	12	2 50	1 50	10	8	9	12	12	-	-	-	-	
100	14	2 35	1 25	10	10	10	12	12	-	-	-	-	
101	12	2 00	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-	
102	20	2 00	1 75	10	10	10	7	7	-	-	-	-	5
103	65	2 00	-	10	10	10	9	9	-	-	-	-	3
104	20	2 00	-	10	10	10	9	9	-	-	-	-	3
105	30	2 00	1 50	10	10	10	8	8	-	-	-	-	4
106	40	2 00	1 50	10	10	10	8	8	-	-	-	-	4
107	20	2 00	-	8	10	9	8	8	-	-	-	-	4
108	6	3 50	-	10	10	10	12	12	-	-	-	-	
109	8	2 15	-	10	10	10	12	12	-	-	-	-	
110	9	2 00	1 50	10	9	9 $\frac{1}{2}$	11	11	-	-	-	-	1
111	7	1 75	-	10	10	10	12	10	-	-	2	-	
112	75	2 00	1 25	10	10	10	12	12	-	-	-	-	
113	16	2 00	1 67	10	10	10	12	6	2	2	2	-	
114	10	2 25	2 00	10	8	9	12	12	-	-	-	-	
115	10	2 00	1 50	10	9	9 $\frac{1}{2}$	12	8	-	-	4	-	
116	48	2 25	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-	
117	40	2 00	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-	
118	24	3 50	1 50	10	10	10	12	10	2	-	-	-	
119	20	3 50	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-	
120	60	2 25	1 50	10	9	9 $\frac{1}{2}$	12	9	3	-	-	-	
121	12	2 00	-	10	10	10	12	12	-	-	-	-	
122	40	2 00	1 50	10	10	10	12	12	-	-	-	-	
123	25	1 75	-	10	10	10	12	12	-	-	-	-	
124	5	3 50	1 00	10	10	10	12	12	-	-	-	-	
125	95	3 00	2 00	10	10	10	12	8	4	-	-	-	
126	20	2 50	2 00	10	10	10	12	12	-	-	-	-	
127	28	2 00	1 00	10	10	10	12	12	-	-	-	-	
128	15	2 50	1 00	10	10	10	12	12	-	-	-	-	
129	10	2 25	1 75	10	10	10	12	12	-	-	-	-	
130	40	2 25	-	10	10	10	12	12	-	-	-	-	

BUILDING — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 131	15	\$2 25	-	10	10	10	12	12	-	-	-	-
132	8	2 50	-	10	10	10	12	12	-	-	-	-
133	25	2 00	\$1 00	10	10	10	12	12	-	-	-	-
134	75	2 25	-	10	10	10	12	12	-	-	-	-
135	50	2 00	1 75	10	10	10	12	12	-	-	-	-
136	15	3 00	1 25	10	8	9	12	12	-	-	-	-
137	10	2 50	2 00	10	10	10	12	12	-	-	-	-
138	10	3 00	2 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
139	8	2 00	-	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
140	12	3 00	1 25	10	8	9	12	12	-	-	-	-
141	20	2 25	1 75	10	10	10	12	12	-	-	-	-
142	10	2 25	-	10	10	10	12	12	-	-	-	-
143	165	2 25	1 50	10	10	10	12	12	-	-	-	-
144	100	2 00	1 50	10	10	10	12	12	-	-	-	-
145	8	2 50	1 75	10	8	9	8	8	-	-	-	4
146	5	2 25	1 75	10	10	10	12	12	-	-	-	-
147	8	2 50	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
148	20	3 00	2 00	10	8	9	8	8	-	-	-	4
149	10	2 50	1 50	10	9	9 $\frac{1}{2}$	10	8	-	-	2	2
150	36	2 00	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
151	11	2 12	1 62	10	9	9 $\frac{1}{2}$	11	11	-	-	-	1
152	45	2 50	1 50	10	10	10	12	12	-	-	-	-
153	25	2 67	1 50	10	8	9	12	9	-	-	3	-
154	10	1 83	-	10	9	9 $\frac{1}{2}$	12	9	3	-	-	-
155	10	2 25	-	10	8	9	12	8	1	2	1	-
156	20	2 25	2 00	10	8	9	12	12	-	-	-	-
157	8	2 25	2 00	10	10	10	12	12	-	-	-	-
158	15	2 25	1 25	10	10	10	10	10	-	-	-	2
159	30	2 50	1 00	10	8	9	12	12	-	-	-	-
160	70	2 50	1 75	10	10	10	12	12	-	-	-	-
161	6	3 00	1 25	10	10	10	12	10	-	-	2	-
162	40	3 00	1 25	10	8	9	8	8	-	-	-	4
163	10	3 00	2 25	10	8	9	12	9	3	-	-	-
164	11	2 50	2 25	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
165	20	2 50	1 50	10	8	9	12	12	-	-	-	-
166	50	2 25	1 25	10	8	9	12	12	-	-	-	-
167	8	2 12	2 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
168	15	2 25	1 75	10	9	9 $\frac{1}{2}$	9	9	-	-	-	3
169	12	2 50	1 75	10	8	9	12	12	-	-	-	-
170	20	2 50	-	10	10	10	12	12	-	-	-	-
171	22	2 25	1 50	10	8	9	12	12	-	-	-	-
172	30	2 25	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
173	7	2 50	-	10	10	10	12	12	-	-	-	-
174	16	2 00	-	10	8	9	12	12	-	-	-	-
175	7	2 25	2 00	10	8	9	10	10	-	-	-	2
176	18	2 50	1 75	10	8	9	10	10	-	-	-	2
177	12	3 50	1 50	10	10	10	12	9	-	-	3	-
178	10	2 00	-	10	10	10	12	10	-	-	2	-
179	10	2 50	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
180	20	2 25	1 25	10	9	9 $\frac{1}{2}$	9	9	-	-	-	3
181	7	2 25	-	10	10	10	12	12	-	-	-	-
182	9	2 25	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
183	12	2 00	-	10	8	9	12	9	-	-	3	-
184	10	2 75	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
185	30	2 00	1 50	10	9	9 $\frac{1}{2}$	12	8	4	-	-	-
186	24	2 25	1 00	10	8	9	12	12	-	-	-	-
187	7	3 00	2 00	9	9	9	12	12	-	-	-	-
188	8	2 25	2 00	10	8	9	8	8	-	-	-	4
189	9	2 50	1 75	10	8	9	12	-	-	12	-	-
190	7	2 25	-	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-

BUILDING — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 191	30	\$2 00	\$1 50	10	8	9	9	9	-	-	-	3
192	15	2 00	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
193	24	3 00	1 50	10	8	9	12	12	-	-	-	-
194	12	2 25	1 75	10	9	9 $\frac{1}{2}$	10	10	-	-	-	2
195	6	2 00	-	10	10	10	12	12	-	-	-	-
196	22	2 50	1 62	10	9	9 $\frac{1}{2}$	10	10	-	-	-	2
197	35	2 75	1 75	10	8	9	10	10	-	-	-	2
198	15	2 00	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
199	25	2 50	1 75	10	10	10	12	12	-	-	-	-
200	10	2 50	1 75	10	8	9	12	12	-	-	-	-
201	25	3 00	1 25	10	10	10	5	5	-	-	-	7
202	20	2 00	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
203	16	2 50	1 75	10	8	9	12	6	3	-	3	-
204	8	2 50	1 63	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
205	12	2 00	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
206	15	2 50	1 75	10	8	9	12	12	-	-	-	-
207	12	2 50	1 50	10	8	9	12	12	-	-	-	-
208	15	2 50	1 50	10	10	10	12	12	-	-	-	-
209	30	2 50	2 00	10	8	9	12	12	-	-	-	-
210	10	2 25	1 50	10	10	10	12	12	-	-	-	-
211	21	2 50	1 55	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
212	8	2 50	1 50	10	10	10	12	12	-	-	-	-
213	10	2 00	-	10	8	9	12	12	-	-	-	-
214	10	2 50	2 25	10	10	10	12	12	-	-	-	-
215	40	2 12	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
216	15	3 00	1 50	10	10	10	12	12	-	-	-	-
217	15	3 50	2 00	10	10	10	12	12	-	-	-	-
218	23	2 25	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
219	8	3 00	1 00	10	10	10	12	12	-	-	-	-
220	10	2 00	1 50	10	10	10	12	12	-	-	-	-
221	6	2 25	-	10	10	10	12	7	-	-	5	-
222	30	2 25	1 25	10	10	10	12	12	-	-	-	-
223	12	3 00	2 00	8	8	8	8	8	-	-	-	4
224	10	2 00	1 50	10	10	10	12	12	-	-	-	-
225	20	2 25	-	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
226	11	2 50	1 50	10	10	10	12	12	-	-	-	-
227	12	2 50	2 00	10	10	10	12	12	-	-	-	-
228	75	2 50	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
229	12	3 00	1 50	10	10	10	12	12	-	-	-	-
230	8	2 25	1 50	10	10	10	12	10	-	-	2	-
231	16	2 25	-	10	10	10	12	10	-	-	2	-
232	75	2 25	-	10	10	10	10	8	-	-	2	2
233	100	2 50	1 75	10	8	9	6	6	-	-	-	6
234	10	2 50	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
235	16	2 50	1 75	10	8	9	12	12	-	-	-	-
236	186	1 75	1 50	10	8	9	9	7	1	-	1	3
237	20	2 00	1 50	10	10	10	12	6	2	-	4	-
238	8	2 00	-	10	8	9	12	12	-	-	-	-
239	10	2 50	1 50	10	8	9	9	7	2	-	-	3
240	15	2 00	1 50	10	10	10	12	12	-	-	-	-

CARRIAGES AND WAGONS.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{4}$ time.	Idle.
No. 1	10	\$2 00	-	10	10	10	12	12	-	-	-	-
2	7	2 50	\$1 50	10	10	10	12	12	-	-	-	-
3	25	2 00	1 25	10	10	10	12	12	-	-	-	-
4	10	2 25	-	10	10	10	12	12	-	-	-	-
5	8	3 00	2 00	10	10	10	12	12	-	-	-	-
6	6	2 70	-	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
7	12	2 00	1 50	10	10	10	12	12	-	-	-	-
8	8	2 50	1 75	10	10	10	12	12	-	-	-	-
9	30	2 75	1 75	10	10	10	12	11	1	-	-	-
10	10	2 50	1 75	10	10	10	12	12	-	-	-	-
11	10	2 50	2 00	10	10	10	12	12	-	-	-	-
12	15	2 50	-	10	10	10	12	12	-	-	-	-
13	16	2 25	1 50	10	10	10	12	12	-	-	-	-
14	52	2 00	1 25	10	12	11	12	12	-	-	-	-
15	12	2 50	1 50	10	9	9 $\frac{1}{2}$	12	8	4	-	-	-
16	20	2 50	1 50	10	9	9 $\frac{1}{2}$	12	9	-	-	3	-
17	20	2 50	1 50	10	8	9	10	8	1	-	1	2
18	50	2 50	1 25	10	9	9 $\frac{1}{2}$	12	10	2	-	-	-
19	20	2 75	1 50	12	9	9 $\frac{1}{2}$	12	10	2	-	-	-
20	20	2 50	1 50	10	9	9 $\frac{1}{2}$	10	10	-	-	-	2
21	12	2 00	1 50	10	9	9 $\frac{1}{2}$	6	6	-	-	-	6
22	12	2 00	1 00	10	9	9 $\frac{1}{2}$	12	9	-	-	3	-
23	25	2 50	2 00	19	10	10	12	11	1	-	-	-
24	20	2 50	2 00	10	10	10	12	12	-	-	-	-
25	8	2 25	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
26	8	2 50	2 00	10	10	10	12	12	-	-	-	-
27	12	1 50	1 25	10	10	10	12	12	-	-	-	-
28	10	2 00	1 00	10	10	10	12	12	-	-	-	-
29	20	-	2 16	10	10	10	12	12	-	-	-	-
30	12	2 75	1 50	10	10	10	12	12	-	-	-	-
31	8	2 50	1 50	10	10	10	12	12	-	-	-	-
32	20	2 00	1 00	10	10	10	12	7	3	2	-	-
33	34	2 25	1 50	10	9	9 $\frac{1}{2}$	11	11	-	-	-	1
34	40	2 25	1 00	10	10	10	12	12	-	-	-	-
35	18	2 50	2 25	10	10	10	12	12	-	-	-	-
36	13	2 25	1 25	10	10	10	10	10	-	-	-	2
37	30	2 50	1 00	10	10	10	12	8	-	-	4	-
38	35	2 25	1 50	10	10	10	12	11	1	-	-	-
39	20	2 25	1 50	10	10	10	12	12	-	-	-	-
40	20	2 50	1 50	10	10	10	12	12	-	-	-	-
41	8	2 50	1 50	10	10	10	12	6	-	-	6	-
42	9	3 00	2 00	10	10	10	12	10	-	-	2	-
43	18	2 75	1 25	10	10	10	12	12	-	-	-	-
44	22	2 50	1 75	10	10	10	12	12	-	-	-	-
45	22	2 50	1 00	10	8	9	11	11	-	-	-	1
46	29	3 00	1 50	10	10	10	12	12	-	-	-	-
47	12	2 50	1 25	10	10	10	12	12	-	-	-	-
48	14	2 00	1 50	10	10	10	12	12	-	-	-	-
49	45	2 50	1 75	10	10	10	12	12	-	-	-	-
50	25	2 50	1 25	10	10	10	12	10	2	-	-	-
51	22	2 50	83	10	10	10	12	12	-	-	-	-
52	8	2 50	1 25	10	10	10	12	12	-	-	-	-
53	14	2 50	1 25	10	10	10	10	10	-	-	-	2
54	45	2 50	1 37	10	10	10	12	12	-	-	-	-
55	15	2 50	1 25	10	10	10	12	12	-	-	-	-
56	20	2 50	1 25	10	10	10	12	10	-	2	-	-
57	27	2 50	1 25	10	10	10	12	10	-	-	2	-
58	100	2 00	1 00	10	10	10	12	12	-	-	-	-
59	10	2 50	1 25	10	10	10	12	12	-	-	-	-
60	25	2 50	1 25	10	10	10	12	12	-	-	-	-

CARRIAGES AND WAGONS — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 61	20	\$2 50	\$1 25	10	10	10	12	12	-	-	-	-
62	25	2 50	1 30	10	10	10	12	12	-	-	-	-
63	20	2 50	1 00	10	10	10	12	9	3	-	-	-
64	15	2 50	1 50	10	10	10	12	12	-	-	-	-
65	22	2 25	1 00	10	10	10	12	12	-	-	-	-
66	60	2 00	1 50	10	10	10	12	12	-	-	-	-
67	25	2 25	1 00	10	10	10	12	12	-	-	-	-
68	15	2 00	1 00	10	10	10	12	12	-	-	-	-
69	40	2 50	1 00	10	10	10	12	12	-	-	-	-
70	18	2 57	1 50	10	10	10	12	12	-	-	-	-
71	10	2 50	-	10	10	10	12	12	-	-	-	-
72	18	2 25	1 50	10	10	10	12	12	-	-	-	-
73	12	2 00	-	10	10	10	12	12	-	-	-	-
74	20	2 50	1 00	10	10	10	12	12	-	-	-	-
75	8	2 50	-	10	10	10	12	10	-	-	2	-
76	22	2 00	1 50	10	10	10	12	12	-	-	-	-
77	30	2 00	-	10	10	10	12	12	-	-	-	-
78	9	2 00	-	10	8	9	12	12	-	-	-	-
79	20	2 50	75	10	10	10	12	12	-	-	-	-
80	12	3 00	1 00	10	10	10	12	10	2	-	-	-
81	30	3 00	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
82	28	2 50	2 00	10	10	10	12	12	-	-	-	-
83	105	2 00	1 50	10	10	10	12	12	-	-	-	-
84	14	2 38	1 09	10	10	10	12	2	-	-	-	-
85	38	2 50	1 00	10	10	10	12	12	-	-	-	-
86	12	2 50	2 00	10	10	10	12	12	-	-	-	-
87	12	2 00	1 00	10	10	10	12	12	-	-	-	-
88	21	2 25	1 50	10	10	10	12	12	-	-	-	-
89	35	2 25	-	10	7	8 $\frac{1}{2}$	12	9	3	-	-	-
90	18	2 50	1 50	10	8	9	12	8	4	-	-	-

CLOTHING.

No. 1	43	\$3 00	\$1 25	10	10	10	12	12	-	-	-	-
2	160	2 00	1 00	10	10	10	12	12	-	-	-	-
3	36	2 25	1 00	10	10	10	12	12	-	-	-	-
4	256	-	50	10	7	8 $\frac{1}{2}$	12	12	-	-	-	-
5	31	85	50	8	8	8	12	12	-	-	-	-
6	100	1 50	1 00	10	8	9	12	10	2	-	-	-
7	149	-	-	10	10	10	9	9	-	-	-	3
8	295	-	-	10	10	10	12	12	-	-	-	-
9	24	1 42	1 00	12	12	12	12	12	-	-	-	-
10	21	1 00	50	10	10	10	12	12	-	-	-	-
11	43	1 50	1 00	10	10	10	12	12	-	-	-	-
12	60	1 33	83	10	8	9	12	12	-	-	-	-
13	36	1 50	75	10	10	10	12	12	-	-	-	-
14	88	1 25	1 00	9	9	9	11	10	1	-	-	1
15	30	1 00	50	10	10	10	12	12	-	-	-	-
16	110	1 00	50	10	10	10	12	12	-	-	-	-
17	36	80	65	9	9	9	11	11	-	-	-	1
18	90	3 00	-	10	10	10	10	10	-	-	-	2
19	22	2 50	1 00	10	10	10	12	10	-	-	2	-
20	195	2 00	1 35	10	10	10	12	12	-	-	-	-

CLOTHING — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 21	36	\$1 25	\$1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
22	23	3 00	1 00	10	10	10	12	12	-	-	-	-
23	19	2 50	1 00	10	10	10	12	12	-	-	-	-
24	80	-	-	10	10	10	12	12	-	-	-	-
25	91	-	-	10	10	10	12	12	-	-	-	-
26	341	-	-	10	10	10	12	12	-	-	-	-
27	84	2 55	1 25	10	10	10	10	10	-	-	-	2
28	142	2 50	1 40	10	10	10	12	10	-	-	2	-
29	214	3 00	1 50	10	10	10	11	7	-	4	-	1
30	25	3 00	80	10	10	10	12	12	-	-	-	-
31	143	-	-	10	10	10	12	12	-	-	-	-
32	6	1 75	1 00	10	10	10	12	12	-	-	-	-
33	37	1 50	75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
34	13	3 50	1 00	10	10	10	12	12	-	-	-	-
35	10	3 00	2 00	10	10	10	12	12	-	-	-	-
36	50	3 00	1 25	10	10	10	12	12	-	-	-	-
37	20	2 50	1 25	10	10	10	12	8	-	2	2	-
38	19	3 50	1 25	10	10	10	12	12	-	-	-	-
39	20	3 00	1 50	10	10	10	12	12	-	-	-	-
40	60	2 50	1 00	10	10	10	11	11	-	-	-	1
41	90	2 50	1 00	9	9	9	12	12	-	-	-	-
42	30	3 58	1 16	10	10	10	12	3	9	-	-	-
43	26	2 00	1 00	10	10	10	12	12	-	-	-	-
44	20	2 50	1 00	10	10	10	12	12	-	-	-	-
45	20	2 00	1 25	10	8	9	11	7	2	-	2	1
46	40	2 25	77	10	10	10	10	10	-	-	-	2
47	54	-	1 00	9	9	9	10	10	-	-	-	2
48	41	2 50	1 25	10	10	10	12	12	-	-	-	-
49	30	2 00	1 00	10	10	10	12	12	-	-	-	-
50	35	1 50	1 00	10	10	10	12	12	-	-	-	-
51	20	1 50	1 00	10	9	9 $\frac{1}{2}$	11	11	-	-	-	1
52	32	-	1 00	8	8	8	12	12	-	-	-	-
53	250	2 25	-	9	9	9	12	12	-	-	-	-
54	52	1 00	75	9	9	9	11	9	-	-	2	1
55	25	3 00	2 00	10	10	10	12	12	-	-	-	-
56	60	2 50	2 00	10	10	10	12	12	-	-	-	-
57	67	1 60	70	9	9	9	12	9	3	-	-	-
58	7	3 00	2 00	10	10	10	8	2	2	2	2	4
59	40	2 61	1 25	10	10	10	12	12	-	-	-	-
60	300	3 00	1 83	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
61	60	1 50	-	10	9	9 $\frac{1}{2}$	6	6	-	-	-	6
62	203	2 00	-	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
63	34	3 00	1 50	10	10	10	12	8	-	4	-	-
64	17	2 00	1 25	10	8	9	12	12	-	-	-	-
65	13	1 50	1 33	10	10	10	12	12	-	-	-	-
66	50	2 50	1 50	10	10	10	12	12	-	-	-	-
67	14	2 00	1 00	10	10	10	12	12	-	-	-	-
68	43	2 50	1 25	10	10	10	12	8	-	-	4	-
69	8	2 50	1 50	10	10	10	12	12	-	-	-	-
70	9	2 00	1 17	10	10	10	12	12	-	-	-	-
71	15	2 00	1 00	10	10	10	12	12	-	-	-	-
72	18	2 00	1 00	10	10	10	12	12	-	-	-	-
73	18	2 00	1 17	10	10	10	12	12	-	-	-	-
74	7	2 00	1 25	10	10	10	12	12	-	-	-	-
75	16	1 70	1 25	10	10	10	12	12	-	-	-	-
76	11	2 50	1 50	10	10	10	12	12	-	-	-	-
77	23	2 50	1 25	10	10	10	12	12	-	-	-	-
78	30	2 50	1 25	10	10	10	12	8	-	4	-	-
79	18	2 00	1 37	10	10	10	12	12	-	-	-	-
80	21	3 00	-	12	12	12	12	12	-	-	-	-

CLOTHING — Continued.

ESTABLISHMENTS.	Average number of employees.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 81	16	\$3 00	\$2 00	10	10	10	12	12	-	-	-	-
82	15	2 50	1 50	10	10	10	12	12	-	-	-	-
83	14	2 00	1 00	10	10	10	12	12	-	-	-	-
84	12	2 00	1 00	10	10	10	12	12	-	-	-	-
85	8	2 50	1 20	10	10	10	12	12	-	-	-	-
86	9	2 50	1 25	10	10	10	12	12	-	-	-	-
87	41	2 50	1 50	10	10	10	12	12	-	-	-	-
88	10	2 50	1 50	10	10	10	12	12	-	-	-	-
89	9	2 50	1 25	10	10	10	12	12	-	-	-	-
90	23	2 50	1 25	10	10	10	12	12	-	-	-	-
91	13	2 50	1 25	10	10	10	12	12	-	-	-	-
92	10	2 50	1 25	10	10	10	12	12	-	-	-	-
93	83	2 50	1 50	9	9	9	12	12	-	-	-	-
94	10	2 50	1 50	10	10	10	10	6	-	-	4	2
95	16	2 50	1 25	10	10	10	12	12	-	-	-	-
96	13	2 50	1 50	10	10	10	12	12	-	-	-	-
97	12	2 50	1 50	10	10	10	12	12	-	-	-	-
98	12	2 50	1 50	16	10	10	12	12	-	-	-	-
99	14	2 50	1 50	10	10	10	12	12	-	-	-	-
100	25	2 50	1 25	10	10	10	12	12	-	-	-	-
101	13	2 00	1 00	10	10	10	12	12	-	-	-	-
102	95	2 50	1 50	10	10	10	12	12	-	-	-	-
103	11	2 00	1 00	10	10	10	12	12	-	-	-	-
104	23	2 50	1 25	10	10	10	12	12	-	-	-	-
105	43	2 50	1 25	10	10	10	12	12	-	-	-	-
106	14	2 50	1 25	10	10	10	12	12	-	-	-	-
107	30	2 50	1 25	10	10	10	12	12	-	-	-	-
108	30	3 00	2 00	10	10	10	12	12	-	-	-	-
109	29	2 50	1 00	10	10	10	9	9	-	-	-	3
110	20	2 00	1 00	10	10	10	12	12	-	-	-	-
111	21	2 50	1 25	10	10	10	12	12	-	-	-	-
112	12	2 50	1 25	10	10	10	12	12	-	-	-	-
113	75	2 50	1 00	10	10	10	12	12	-	-	-	-
114	16	2 50	1 25	10	10	10	12	12	-	-	-	-
115	13	2 00	1 00	10	10	10	12	12	-	-	-	-
116	26	2 00	1 00	10	10	10	12	12	-	-	-	-
117	12	2 25	1 00	10	10	10	12	12	-	-	-	-
118	12	2 50	1 17	10	10	10	12	12	-	-	-	-
119	30	2 50	1 25	10	10	10	12	12	-	-	-	-
120	14	2 50	1 00	10	10	10	12	12	-	-	-	-
121	31	2 50	1 25	10	10	10	12	12	-	-	-	-
122	18	2 50	1 25	10	10	10	12	12	-	-	-	-
123	55	1 00	50	9	9	9	12	12	-	-	-	-
124	40	2 00	1 25	10	10	10	12	8	2	-	2	-
125	200	1 25	75	9	9	9	10	6	-	-	4	2
126	50	2 50	75	10	10	10	12	12	-	-	-	-
127	20	1 30	1 00	9	9	9	12	12	-	-	-	-
128	60	2 50	1 00	9	9	9	12	10	-	-	2	-
129	320	3 00	1 50	10	9	9½	12	12	-	-	-	-
130	80	2 00	1 00	10	10	10	12	12	-	-	-	-
131	31	1 50	1 00	9	9	9	12	12	-	-	-	-
132	43	1 50	75	9	9	9	12	12	-	-	-	-
133	16	2 37	1 00	10	9	9½	12	12	-	-	-	-
134	90	2 50	1 50	10	10	10	12	12	-	-	-	-
135	70	3 50	1 50	9	9	9	12	12	-	-	-	-
136	149	3 00	1 75	9	9	9	12	12	-	-	-	-
137	72	2 50	1 00	10	10	10	12	12	-	-	-	-
138	550	3 50	90	10	10	10	11	10	-	-	1	1
139	188	3 00	1 75	9	9	9	12	12	-	-	-	-
140	25	1 00	75	10	10	10	12	12	-	-	-	-

CLOTHING — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 141	73	\$3 00	\$1 00	10	10	10	11	11	-	-	-	1
142	175	2 00	1 00	9	9	9	12	6	2	-	4	-
143	25	2 00	1 00	9	9	9	10	10	-	-	-	2
144	53	1 50	-	9	9	9	10	6	-	4	-	2
145	50	3 00	1 50	10	10	10	12	7	-	-	5	-
146	16	1 75	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
147	50	3 50	1 50	10	10	10	12	11	-	-	1	-
148	106	1 50	50	10	10	10	9	9	-	-	-	3
149	206	1 25	83	9	9	9	11	11	-	-	-	1
150	600	5 00	1 00	9	9	9	12	12	-	-	-	-
151	128	4 00	1 50	10	10	10	12	12	-	-	-	-
152	31	-	1 25	8	8	8	11	11	-	-	-	1
153	60	1 00	50	9	9	9	10	10	-	-	-	2
154	296	3 00	1 00	8	9	8 $\frac{1}{2}$	12	12	-	-	-	-
155	55	4 00	75	10	10	10	12	12	-	-	-	-
156	22	1 62	-	9	9	9	12	12	-	-	-	-
157	800	2 50	1 00	10	10	10	12	12	-	-	-	-
158	400	3 00	1 75	10	10	10	12	12	-	-	-	-
159	52	2 00	50	10	10	10	11	10	-	-	1	1
160	100	3 00	1 00	10	10	10	12	12	-	-	-	-

COTTON GOODS.

No. 1	3,050	-	-	10	10	10	12	12	-	-	-	-
2	1,525	-	-	10	10	10	12	12	-	-	-	-
3	1,564	-	-	10	10	10	12	12	-	-	-	-
4	2,780	-	-	10	10	10	12	12	-	-	-	-
5	1,077	-	-	10	10	10	12	12	-	-	-	-
6	953	-	-	10	10	10	12	12	-	-	-	-
7	716	-	-	10	10	10	12	12	-	-	-	-
8	163	-	-	10	10	10	12	12	-	-	-	-
9	39	-	-	10	10	10	12	12	-	-	-	-
10	40	-	-	10	10	10	12	12	-	-	-	-
11	112	-	-	10	10	10	6	6	-	-	-	6
12	1,207	-	-	10	10	10	12	12	-	-	-	-
13	59	-	-	10	10	10	12	12	-	-	-	-
14	54	-	-	10	10	10	12	12	-	-	-	-
15	37	-	-	10	10	10	12	12	-	-	-	-
16	58	-	-	10	10	10	12	12	-	-	-	-
17	870	-	-	10	10	10	12	12	-	-	-	-
18	31	-	-	10	10	10	12	12	-	-	-	-
19	244	-	-	10	10	10	12	12	-	-	-	-
20	212	-	-	10	10	10	12	12	-	-	-	-
21	173	-	-	10	10	10	12	12	-	-	-	-
22	136	-	-	10	10	10	12	12	-	-	-	-
23	156	-	-	10	10	10	12	12	-	-	-	-
24	106	-	-	10	10	10	12	12	-	-	-	-
25	44	-	-	10	10	10	12	12	-	-	-	-
26	211	-	-	10	10	10	12	12	-	-	-	-
27	1,045	-	-	10	10	10	12	12	-	-	-	-
28	1,748	-	-	10	10	10	12	12	-	-	-	-
29	499	-	-	10	10	10	12	12	-	-	-	-
30	1,046	-	-	10	10	10	12	12	-	-	-	-

COTTON GOODS — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 31	155	-	-	10	10	10	12	12	-	-	-	-
32	252	-	-	10	10	10	12	12	-	-	-	-
33	252	-	-	10	10	10	12	12	-	-	-	-
34	278	-	-	10	10	10	12	12	-	-	-	-
35	261	-	-	10	10	10	12	12	-	-	-	-
36	313	-	-	10	10	10	12	12	-	-	-	-
37	343	-	-	10	10	10	12	12	-	-	-	-
38	252	-	-	10	10	10	12	12	-	-	-	-
39	1,422	-	-	10	10	10	12	12	-	-	-	-
40	108	-	-	10	10	10	12	12	-	-	-	-
41	72	-	-	10	10	10	12	12	-	-	-	-
42	238	-	-	10	10	10	12	12	-	-	-	-
43	408	-	-	10	10	10	12	12	-	-	-	-
44	299	-	-	10	10	10	12	12	-	-	-	-
45	104	-	-	10	10	10	12	12	-	-	-	-
46	1,054	-	-	10	10	10	12	12	-	-	-	-
47	500	-	-	10	10	10	12	12	-	-	-	-
48	312	-	-	10	10	10	12	12	-	-	-	-
49	387	-	-	10	10	10	12	12	-	-	-	-
50	834	-	-	10	10	10	12	12	-	-	-	-
51	295	-	-	10	10	10	12	12	-	-	-	-
52	435	-	-	10	10	10	12	12	-	-	-	-
53	742	-	-	10	10	10	12	12	-	-	-	-
54	423	-	-	10	10	10	12	12	-	-	-	-
55	543	-	-	10	10	10	12	12	-	-	-	-
56	845	-	-	10	10	10	12	12	-	-	-	-
57	250	-	-	10	10	10	12	12	-	-	-	-
58	192	-	-	10	10	10	12	12	-	-	-	-
59	289	-	-	10	10	10	12	12	-	-	-	-
60	378	-	-	10	10	10	12	12	-	-	-	-
61	638	-	-	10	10	10	12	12	-	-	-	-
62	138	-	-	10	10	10	12	12	-	-	-	-
63	481	-	-	10	10	10	12	12	-	-	-	-
64	350	-	-	10	10	10	12	12	-	-	-	-
65	452	-	-	10	10	10	12	12	-	-	-	-
66	398	-	-	10	10	10	12	12	-	-	-	-
67	361	-	-	10	10	10	12	12	-	-	-	-
68	341	-	-	10	10	10	12	12	-	-	-	-
69	384	-	-	10	10	10	12	12	-	-	-	-
70	379	-	-	10	10	10	12	12	-	-	-	-
71	890	-	-	10	10	10	12	12	-	-	-	-
72	592	-	-	10	10	10	12	12	-	-	-	-
73	382	-	-	10	10	10	12	12	-	-	-	-
74	62	-	-	10	10	10	12	12	-	-	-	-
75	1,810	-	-	10	10	10	12	12	-	-	-	-
76	933	-	-	10	10	10	12	12	-	-	-	-
77	75	-	-	10	10	10	12	12	-	-	-	-
78	28	-	-	10	10	10	12	12	-	-	-	-
79	825	-	-	10	10	10	12	12	-	-	-	-
80	74	-	-	10	10	10	12	12	-	-	-	-
81	177	-	-	10	10	10	12	12	-	-	-	-
82	110	-	-	10	10	10	12	12	-	-	-	-
83	88	-	-	10	10	10	12	12	-	-	-	-
84	107	-	-	10	10	10	12	12	-	-	-	-
85	38	-	-	10	10	10	12	12	-	-	-	-
86	72	-	-	10	10	10	12	12	-	-	-	-
87	179	-	-	10	10	10	12	12	-	-	-	-
88	937	-	-	10	10	10	12	12	-	-	-	-
89	1,516	-	-	10	10	10	12	12	-	-	-	-
90	326	-	-	10	10	10	12	12	-	-	-	-

COTTON GOODS — Concluded.

ESTABLISHMENTS.	Average number of employees.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 91	101	-	-	10	10	10	12	12	-	-	-	-
92	694	-	-	10	10	10	12	12	-	-	-	-
93	1,216	-	-	10	10	10	12	12	-	-	-	-
94	425	-	-	10	10	10	12	12	-	-	-	-
95	565	-	-	10	10	10	12	12	-	-	-	-
96	278	-	-	10	10	10	12	12	-	-	-	-
97	441	-	-	10	10	10	12	12	-	-	-	-
98	666	-	-	10	10	10	12	12	-	-	-	-
99	36	-	-	10	10	10	12	12	-	-	-	-
100	250	$\frac{2}{3}$ 00	$\frac{5}{6}$ 00	10	10	10	12	12	-	-	-	-
101	90	-	-	10	10	10	12	12	-	-	-	-
102	65	-	-	10	10	10	12	12	-	-	-	-
103	344	-	-	10	10	10	12	12	-	-	-	-
104	65	1 50	70	10	10	10	12	12	-	-	-	-
105	98	-	-	10	10	10	12	12	-	-	-	-
106	395	-	-	10	10	10	12	12	-	-	-	-
107	1,285	-	-	10	10	10	12	12	-	-	-	-
108	65	2 75	1 00	10	10	10	12	12	-	-	-	-
109	62	-	-	10	10	10	12	12	-	-	-	-
110	59	-	-	10	10	10	12	12	-	-	-	-
111	60	-	-	10	10	10	12	12	-	-	-	-
112	642	-	-	10	10	10	12	12	-	-	-	-
113	98	-	-	10	10	10	12	12	-	-	-	-
114	1,286	2 50	1 40	10	10	10	11	11	-	-	-	1
115	81	-	-	10	10	10	12	12	-	-	-	-
116	100	-	-	10	10	10	12	12	-	-	-	-
117	128	-	-	10	10	10	12	12	-	-	-	-
118	121	-	-	10	10	10	12	12	-	-	-	-
119	123	-	-	10	10	10	12	12	-	-	-	-
120	55	-	-	10	10	10	12	12	-	-	-	-
121	70	-	-	10	10	10	12	12	-	-	-	-
122	36	-	-	10	10	10	12	12	-	-	-	-
123	51	-	-	10	10	10	12	12	-	-	-	-
124	130	-	-	10	10	10	12	12	-	-	-	-
125	21	-	-	10	10	10	12	12	-	-	-	-
126	124	-	-	10	10	10	12	12	-	-	-	-
127	50	-	-	10	10	10	12	12	-	-	-	-
128	50	-	-	10	10	10	12	12	-	-	-	-
129	205	-	-	10	10	10	12	12	-	-	-	-
130	85	-	-	10	10	10	12	12	-	-	-	-
131	149	-	-	10	10	10	12	12	-	-	-	-
132	168	-	-	10	10	10	12	12	-	-	-	-
133	67	2 25	1 00	10	10	10	12	12	-	-	-	-
134	118	-	-	10	10	10	12	12	-	-	-	-
135	30	2 25	1 00	10	10	10	12	12	-	-	-	-
136	186	-	-	10	10	10	12	12	-	-	-	-
137	335	-	-	10	10	10	12	12	-	-	-	-
138	117	-	-	10	10	10	12	12	-	-	-	-
139	125	-	-	10	10	10	12	12	-	-	-	-
140	561	-	-	10	10	10	12	12	-	-	-	-
141	492	-	-	10	10	10	12	12	-	-	-	-
142	465	-	-	10	10	10	12	12	-	-	-	-
143	157	-	-	10	10	10	12	12	-	-	-	-
144	226	-	-	10	10	10	12	12	-	-	-	-
145	20	-	-	10	10	10	12	12	-	-	-	-
146	243	-	-	10	10	10	12	12	-	-	-	-
147	15	-	-	10	10	10	12	12	-	-	-	-
148	44	-	-	10	10	10	12	12	-	-	-	-
149	69	-	-	10	10	10	12	12	-	-	-	-
150	47	-	-	10	10	10	12	12	-	-	-	-

FOOD PREPARATIONS.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 1	13	\$2 00	-	10	10	10	12	12	-	-	-	-
2	180	2 50	\$1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
3	28	2 50	1 50	10	10	10	12	12	-	-	-	-
4	33	2 25	1 00	10	10	10	12	12	-	-	-	-
5	54	2 00	1 50	10	10	10	12	12	-	-	-	-
6	130	3 56	1 62	10	10	10	11	6	-	5	-	1
7	28	2 25	1 00	10	10	10	12	12	-	-	-	-
8	75	-	1 75	12	12	12	12	12	-	-	-	-
9	400	2 00	1 25	10	10	10	12	12	-	-	-	-
10	25	3 00	1 75	12	10	11	12	12	-	-	-	-
11	11	3 00	1 63	12	11	10 $\frac{1}{2}$	12	12	-	-	-	-
12	13	2 00	1 25	10	10	10	12	12	-	-	-	-
13	20	2 00	1 00	10	10	10	12	12	-	-	-	-
14	206	1 83	1 33	10	10	10	12	12	-	-	-	-
15	80	2 50	1 50	11	10	10 $\frac{1}{2}$	12	12	-	-	-	-
16	17	2 50	1 75	10	10	10	12	12	-	-	-	-
17	11	2 00	1 17	10	10	10	12	12	-	-	-	-
18	16	2 00	1 50	10	10	10	12	12	-	-	-	-
19	8	2 75	2 00	12	9	10 $\frac{1}{2}$	12	12	-	-	-	-
20	9	2 50	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
21	11	2 50	1 25	11	10	10 $\frac{1}{2}$	12	12	-	-	-	-
22	10	2 00	-	12	12	12	12	12	-	-	-	-
23	13	2 50	1 00	10	10	10	12	12	-	-	-	-
24	30	3 00	1 50	10	10	10	12	12	-	-	-	-
25	8	2 50	2 00	10	10	10	12	12	-	-	-	-
26	23	2 25	1 75	10	10	10	12	12	-	-	-	-
27	20	1 50	1 00	10	10	10	12	12	-	-	-	-
28	21	2 00	1 50	10	10	10	12	12	-	-	-	-
29	42	2 50	1 00	10	10	10	12	12	-	-	-	-
30	16	2 50	1 00	10	10	10	12	12	-	-	-	-
31	32	2 50	1 00	10	10	10	12	12	-	-	-	-
32	22	2 00	1 50	10	10	10	12	12	-	-	-	-
33	18	2 00	1 25	12	12	12	12	6	3	-	3	-
34	15	2 25	1 75	11	10	10 $\frac{1}{2}$	12	12	-	-	-	-
35	8	2 50	-	12	12	12	12	12	-	-	-	-
36	20	1 75	1 25	10	10	10	12	12	-	-	-	-
37	20	2 25	1 00	10	10	10	12	12	-	-	-	-
38	39	2 50	1 25	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
39	12	2 00	1 00	10	10	10	12	12	-	-	-	-
40	30	-	-	10	10	10	12	12	-	-	-	-
41	61	2 50	-	10	10	10	12	12	-	-	-	-
42	5	3 00	-	12	12	12	12	12	-	-	-	-
43	18	2 00	-	10	10	10	9	9	-	-	-	3
44	8	2 50	-	10	10	10	12	12	-	-	-	-
45	25	3 50	2 00	12	12	12	12	12	-	-	-	-
46	7	3 00	1 50	12	12	12	12	12	-	-	-	-
47	20	3 00	2 00	12	12	12	12	12	-	-	-	-
48	9	3 00	1 50	12	12	12	12	12	-	-	-	-
49	11	2 50	1 50	11	11	11	12	12	-	-	-	-
50	8	3 50	2 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
51	100	2 00	1 50	10	10	10	10	10	-	-	-	2
52	75	2 00	1 00	10	10	10	12	12	-	-	-	-
53	32	3 00	1 50	10	10	10	12	12	-	-	-	-
54	200	2 50	1 50	10	10	10	7	7	-	-	-	5
55	40	2 75	1 75	10	10	10	7	7	-	-	-	5
56	55	2 00	1 25	10	9	9 $\frac{1}{2}$	10	4	-	-	6	2
57	100	2 00	50	9	9	9	12	4	2	4	2	-
58	10	2 00	-	10	10	10	12	12	-	-	-	-
59	22	2 25	1 75	10	10	10	12	12	-	-	-	-
60	20	2 25	2 00	10	10	10	12	12	-	-	-	-

FOOD PREPARATIONS — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 61	10	\$2 00	-	12	12	12	12	12	-	-	-	-
62	117	2 50	\$1 25	10	10	10	10	10	-	-	-	2
63	10	2 25	1 00	12	10	11	12	12	-	-	-	-
64	50	2 50	1 00	10	10	10	12	12	-	-	-	-
65	9	2 00	-	10	10	10	12	12	-	-	-	-
66	30	2 25	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
67	17	2 00	1 25	12	12	12	12	12	-	-	-	-
68	15	1 66	1 00	10	10	10	12	12	-	-	-	-
69	30	1 75	1 00	10	10	10	12	6	-	3	3	-
70	20	2 00	75	10	10	10	12	12	-	-	-	-

FURNITURE.

No. 1	37	\$1 60	\$1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
2	15	2 50	1 00	10	10	10	12	12	-	-	-	-
3	115	2 50	1 25	10	10	10	12	12	-	-	-	-
4	50	2 00	1 00	10	10	10	11	11	-	-	-	1
5	240	2 00	1 50	10	10	10	12	12	-	-	-	-
6	12	1 50	-	10	10	10	12	12	-	-	-	-
7	91	1 83	1 25	10	10	10	12	12	-	-	-	-
8	23	2 50	1 50	10	10	10	12	12	-	-	-	-
9	14	2 00	50	10	10	10	12	12	-	-	-	-
10	8	3 00	2 00	10	10	10	12	12	-	-	-	-
11	25	1 75	1 25	10	10	10	12	12	-	-	-	-
12	55	2 50	1 50	10	10	10	12	12	-	-	-	-
13	20	1 67	1 25	10	10	10	12	12	-	-	-	-
14	8	2 12	1 50	10	10	10	12	12	-	-	-	-
15	17	2 00	-	10	10	10	12	12	-	-	-	-
16	30	2 00	1 50	10	8	9	12	12	-	-	-	-
17	12	2 00	1 25	9	8	8 $\frac{1}{2}$	12	12	-	-	-	-
18	15	2 00	1 50	10	10	10	12	12	-	-	-	-
19	9	2 50	1 25	10	10	10	12	12	-	-	-	-
20	23	2 00	1 25	10	10	10	12	12	-	-	-	-
21	15	2 50	1 50	10	10	10	12	12	-	-	-	-
22	75	2 50	2 00	10	10	10	12	9	3	-	-	-
23	10	2 00	-	10	10	10	12	12	-	-	-	-
24	32	2 50	1 75	10	10	10	12	12	-	-	-	-
25	13	1 62	1 00	10	10	10	12	12	-	-	-	-
26	10	2 25	1 50	10	10	10	12	12	-	-	-	-
27	20	2 50	-	10	10	10	12	12	-	-	-	-
28	25	2 00	-	10	10	10	12	12	-	-	-	-
29	50	2 00	-	10	10	10	12	12	-	-	-	-
30	12	2 25	-	10	10	10	12	12	-	-	-	-
31	45	2 50	1 67	10	8	9	12	12	-	-	-	-
32	12	2 50	1 50	10	10	10	12	12	-	-	-	-
33	40	2 25	1 25	10	10	10	5	5	-	-	-	7
34	19	2 50	1 00	10	10	10	12	12	-	-	-	-
35	10	2 50	2 25	10	10	10	12	12	-	-	-	-
36	23	2 00	1 50	10	10	10	12	12	-	-	-	-
37	50	2 00	1 50	10	10	10	12	12	-	-	-	-
38	16	2 25	1 33	10	10	10	12	12	-	-	-	-
39	30	2 00	1 25	10	9	9 $\frac{1}{2}$	9	9	-	-	-	3
40	12	2 50	1 25	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-

FURNITURE — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 41	10	\$2 50	\$2 25	10	10	10	11	11	-	-	-	1
42	15	3 00	2 00	10	9	9 $\frac{1}{2}$	12	-	-	-	12	-
43	18	2 00	1 50	10	9	9 $\frac{1}{2}$	12	8	4	-	-	-
44	31	2 50	1 50	10	8	9	11	9	2	-	-	1
45	15	2 00	1 25	10	10	10	12	12	-	-	-	-
46	27	2 50	1 00	10	8	9	9	9	-	-	-	3
47	18	2 00	-	10	10	10	12	12	-	-	-	-
48	12	2 00	1 50	10	10	10	12	12	-	-	-	-
49	25	2 50	-	10	10	10	12	12	-	-	-	-
50	10	2 00	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
51	15	2 00	-	10	10	10	12	12	-	-	-	-
52	30	2 00	1 50	10	10	10	12	12	-	-	-	-
53	8	2 00	-	10	10	10	12	12	-	-	-	-
54	12	2 25	-	10	10	10	12	12	-	-	-	-
55	28	2 00	-	10	10	10	12	10	2	-	-	-
56	15	2 50	-	10	10	10	12	12	-	-	-	-
57	40	2 00	-	10	8	9	12	12	-	-	-	-
58	8	2 00	-	10	10	10	12	12	-	-	-	-
59	13	2 00	1 75	10	10	10	12	12	-	-	-	-
60	10	2 00	1 75	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
61	100	2 50	1 37	10	10	10	12	12	-	-	-	-
62	10	1 50	-	10	10	10	12	12	-	-	-	-
63	20	2 25	-	10	10	10	12	12	-	-	-	-
64	16	2 00	-	10	10	10	12	9	3	-	-	-
65	60	1 50	1 00	10	10	10	12	12	-	-	-	-
66	12	2 00	-	9	9	9	12	9	-	-	3	-
67	30	2 00	1 00	10	9	9 $\frac{1}{2}$	12	8	4	-	-	-
68	16	2 50	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
69	16	2 00	-	10	10	10	12	12	-	-	-	-
70	15	1 75	-	10	10	10	12	12	-	-	-	-
71	50	2 50	1 50	10	9	9 $\frac{1}{2}$	12	10	2	-	-	-
72	50	2 25	1 00	10	10	10	10	7	3	-	-	2
73	46	2 50	2 00	10	10	10	12	12	-	-	-	-
74	75	2 50	1 67	10	9	9 $\frac{1}{2}$	12	9	3	-	-	-
75	20	2 00	1 50	10	10	10	12	12	-	-	-	-
76	10	1 80	-	10	10	10	12	12	-	-	-	-
77	11	2 00	1 50	10	10	10	12	12	-	-	-	-
78	35	2 00	1 25	10	10	10	11	11	-	-	-	1
79	43	2 00	-	10	10	10	10	10	-	-	-	2
80	58	2 62	1 00	10	10	10	12	12	-	-	-	-
81	8	2 00	-	10	10	10	12	12	-	-	-	-
82	15	2 25	1 50	10	10	10	12	12	-	-	-	-
83	16	2 25	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
84	50	2 00	1 00	9	9	9	12	12	-	-	-	-
85	30	2 00	1 00	10	10	10	12	12	-	-	-	-
86	12	2 00	-	10	8	9	11	6	5	-	-	1
87	10	2 00	1 25	10	10	10	12	12	-	-	-	-
88	69	2 00	1 50	10	10	10	12	12	-	-	-	-
89	100	2 00	1 00	10	10	10	12	9	3	-	-	-
90	25	2 00	1 50	10	10	10	12	12	-	-	-	-
91	10	2 00	1 50	10	10	10	12	12	-	-	-	-
92	12	3 00	2 00	10	10	10	10	10	-	-	-	2
93	75	2 00	1 50	10	9	9 $\frac{1}{2}$	10	10	-	-	-	2
94	90	2 25	1 50	10	10	10	12	12	-	-	-	-
95	84	2 00	1 25	10	10	10	11	11	-	-	-	1
96	30	1 75	1 00	10	9	9 $\frac{1}{2}$	12	10	2	-	-	-
97	10	3 00	2 00	10	10	10	10	10	-	-	-	2
98	7	2 00	-	10	10	10	12	12	-	-	-	-
99	17	2 50	1 37	10	10	10	12	12	-	-	-	-
100	72	2 25	1 50	10	10	10	12	12	-	-	-	-

LEATHER.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 1	125	\$1 50	\$1 25	10	10	10	12	12	-	-	-	-
2	26	2 00	1 25	10	10	10	11	11	-	-	-	1
3	85	1 75	1 25	10	10	10	12	13	-	-	-	-
4	39	2 25	1 00	10	10	10	12	12	-	-	-	-
5	25	2 25	1 25	10	10	10	12	12	-	-	-	-
6	40	2 00	1 25	11	11	11	12	12	-	-	-	-
7	100	2 00	1 25	10	10	10	12	12	-	-	-	-
8	120	1 50	1 00	10	10	10	12	12	-	-	-	-
9	20	3 00	1 50	10	10	10	12	12	-	-	-	-
10	16	2 50	1 00	10	10	10	12	12	-	-	-	-
11	12	2 50	1 25	10	10	10	12	12	-	-	-	-
12	20	1 75	1 25	10	10	10	11	11	-	-	-	1
13	185	1 60	1 33	10	10	10	12	12	-	-	-	-
14	75	2 25	1 50	10	10	10	12	12	-	-	-	-
15	110	2 00	1 25	10	10	10	12	12	-	-	-	-
16	32	1 50	1 25	10	10	10	12	12	-	-	-	-
17	20	2 25	1 25	10	10	10	11	11	-	-	-	1
18	25	1 75	1 00	10	10	10	12	12	-	-	-	-
19	40	1 75	1 25	10	10	10	12	12	-	-	-	-
20	100	2 00	1 16	10	10	10	12	12	-	-	-	-
21	55	2 50	1 50	10	10	10	12	12	-	-	-	-
22	13	1 75	1 25	10	10	10	12	12	-	-	-	-
23	163	2 25	1 25	10	10	10	12	12	-	-	-	-
24	12	1 75	1 10	10	10	10	12	12	-	-	-	-
25	20	1 50	1 00	10	10	10	12	12	-	-	-	-
26	16	2 50	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
27	42	2 00	1 25	10	10	10	12	12	-	-	-	-
28	31	1 50	1 25	10	10	10	11	11	-	-	-	1
29	120	2 50	1 33	10	10	10	12	12	-	-	-	-
30	25	2 00	1 50	10	10	10	12	12	-	-	-	-
31	30	1 67	1 13	10	10	10	12	12	-	-	-	-
32	183	2 50	1 25	10	10	10	12	12	-	-	-	-
33	67	2 00	1 25	10	10	10	12	12	-	-	-	-
34	93	2 00	1 33	10	10	10	12	12	-	-	-	-
35	65	2 00	1 33	10	10	10	12	12	-	-	-	-
36	27	2 50	1 25	10	10	10	12	12	-	-	-	-
37	96	1 50	1 00	10	10	10	12	12	-	-	-	-
38	90	2 00	1 25	10	10	10	12	12	-	-	-	-
39	35	2 00	1 00	10	10	10	12	12	-	-	-	-
40	254	2 25	1 23	9	9	9	12	12	-	-	-	-
41	40	2 50	1 33	10	10	10	12	12	-	-	-	-
42	100	1 75	1 25	10	10	10	12	12	-	-	-	-
43	30	1 75	1 25	10	10	10	12	12	-	-	-	-
44	60	1 64	1 25	10	10	10	12	12	-	-	-	-
45	12	2 00	1 50	10	10	10	12	12	-	-	-	-
46	19	2 00	1 20	10	10	10	12	12	-	-	-	-
47	18	3 00	1 25	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
48	45	2 75	1 75	10	10	10	12	12	-	-	-	-
49	40	2 00	1 25	10	10	10	12	12	-	-	-	-
50	30	2 00	1 25	10	10	10	6	5	-	-	1	6
51	17	2 50	1 50	9	9	9	12	9	3	-	-	-
52	22	1 50	1 00	12	12	12	12	12	-	-	-	-
53	15	2 00	1 00	10	10	10	12	12	-	-	-	-
54	113	2 50	1 62	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
55	40	1 67	1 25	10	10	10	12	12	-	-	-	-
56	50	2 00	1 00	10	10	10	12	12	-	-	-	-
57	30	2 00	1 50	10	10	10	12	12	-	-	-	-
58	40	2 50	1 67	10	10	10	12	12	-	-	-	-
59	33	2 50	1 75	10	10	10	12	12	-	-	-	-
60	103	2 50	1 33	10	10	10	12	12	-	-	-	-

LEATHER — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 61	45	\$2 00	\$1 00	10	10	10	12	12	-	-	-	-
62	19	2 50	1 25	10	10	10	12	12	-	-	-	-
63	78	2 50	1 50	10	10	10	12	12	-	-	-	-
64	45	2 00	1 50	10	10	10	12	12	-	-	-	-
65	26	2 50	1 50	10	10	10	12	11	-	-	1	-
66	30	2 50	1 25	10	10	10	12	12	-	-	-	-
67	8	2 25	1 25	10	10	10	12	12	-	-	-	-
68	10	2 50	1 00	10	10	10	12	12	-	-	-	-
69	60	2 09	-	10	10	10	12	12	-	-	-	-
70	20	1 50	1 17	10	10	10	12	12	-	-	-	-
71	120	2 50	1 33	10	10	10	12	12	-	-	-	-
72	12	2 67	1 60	10	10	10	12	12	-	-	-	-
73	40	2 00	1 50	10	10	10	12	12	-	-	-	-
74	20	2 50	1 50	10	10	10	12	12	-	-	-	-
75	59	2 50	1 50	10	10	10	12	12	-	-	-	-
76	64	2 00	1 17	10	10	10	12	12	-	-	-	-
77	52	1 50	1 25	10	10	10	5	5	-	-	-	7
78	40	3 00	1 33	10	10	10	12	12	-	-	-	-
79	40	2 00	1 50	10	10	10	12	12	-	-	-	-
80	45	2 00	1 00	10	10	10	10	10	-	-	-	2
81	18	2 50	1 50	10	10	10	12	12	-	-	-	-
82	15	1 75	-	10	10	10	12	7	-	-	5	-
83	40	2 00	1 50	10	10	10	12	12	-	-	-	-
84	35	2 50	2 00	10	10	10	12	12	-	-	-	-
85	20	2 00	1 50	10	10	10	12	12	-	-	-	-
86	30	2 00	1 00	10	10	10	11	6	3	-	2	1
87	7	2 00	1 00	10	10	10	12	12	-	-	-	-
88	25	2 00	-	10	10	0	12	12	-	-	-	-
89	35	2 00	1 50	10	10	0	12	12	-	-	-	-
90	50	2 50	1 66	10	10	10	12	12	-	-	-	-
91	20	2 00	-	10	10	10	12	12	-	-	-	-
92	18	1 75	-	10	10	10	12	12	-	-	-	-
93	42	1 75	-	10	10	10	12	12	-	-	-	-
94	80	2 50	1 50	10	10	10	12	12	-	-	-	-
95	21	2 00	1 50	10	10	10	13	12	-	-	-	-
96	35	2 00	1 50	10	10	10	12	12	-	-	-	-
97	20	2 00	-	10	10	10	12	12	-	-	-	-
98	13	2 16	1 50	10	10	10	12	12	-	-	-	-
99	30	2 00	1 50	10	10	10	12	12	-	-	-	-
100	20	2 00	1 50	10	10	10	12	12	-	-	-	-
101	35	2 00	1 50	10	10	10	12	12	-	-	-	-
102	12	1 50	-	10	10	10	12	12	-	-	-	-
103	35	2 25	1 50	10	10	10	12	12	-	-	-	-
104	18	2 50	1 50	10	10	10	12	12	-	-	-	-
105	13	1 75	1 50	10	10	10	12	12	-	-	-	-
106	60	2 00	1 50	10	10	10	12	12	-	-	-	-
107	30	1 50	1 25	10	10	10	12	12	-	-	-	-
108	10	2 50	1 33	10	10	10	12	12	-	-	-	-
109	16	1 50	-	10	10	10	12	12	-	-	-	-
110	17	2 50	1 75	10	10	10	12	12	-	-	-	-
111	25	2 50	1 50	10	10	10	12	12	-	-	-	-
112	54	2 50	1 50	10	10	10	12	12	-	-	-	-
113	14	1 50	-	10	10	10	12	12	-	-	-	-
114	31	2 00	1 50	10	10	10	12	12	-	-	-	-
115	12	1 75	-	10	10	10	12	12	-	-	-	-
116	18	2 50	1 50	10	10	10	12	12	-	-	-	-
117	40	2 50	1 75	10	10	10	12	12	-	-	-	-
118	20	1 50	1 00	10	10	10	12	9	-	-	3	-
119	14	2 00	1 50	10	10	10	12	12	-	-	-	-
120	20	3 00	1 50	10	10	10	12	12	-	-	-	-

LEATHER — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 121	55	\$1 33	\$1 00	10	10	10	12	12	-	-	-	-
122	30	2 75	1 00	10	8	9	12	10	-	-	2	-
123	15	1 33	-	10	10	10	12	12	-	-	-	-
124	17	2 00	1 50	10	10	10	12	12	-	-	-	-
125	29	2 00	1 25	10	10	10	12	12	-	-	-	-
126	23	2 00	1 50	10	10	10	12	12	-	-	-	-
127	12	1 66	1 50	10	10	10	12	11	1	-	-	-
128	118	2 00	1 25	10	10	10	12	12	-	-	-	-
129	30	1 66	1 17	10	10	10	12	12	-	-	-	-
130	21	3 00	1 50	10	10	10	12	12	-	-	-	-
131	17	2 00	1 50	10	10	10	12	12	-	-	-	-
132	18	1 75	1 50	10	10	10	12	12	-	-	-	-
133	10	2 00	1 50	10	10	10	12	12	-	-	-	-
134	15	1 67	1 33	10	10	10	12	12	-	-	-	-
135	50	2 50	1 33	10	10	10	12	12	-	-	-	-
136	40	2 00	1 33	10	10	10	12	12	-	-	-	-
137	13	2 00	1 33	10	10	10	12	12	-	-	-	-
138	23	1 50	-	10	10	10	8	8	-	-	-	4
139	75	1 65	83	10	10	10	11	4	5	-	2	1
140	24	2 50	1 33	10	10	10	12	12	-	-	-	-
141	35	2 00	1 50	10	10	10	12	12	-	-	-	-
142	7	5 00	1 50	10	10	10	12	12	-	-	-	-
143	15	2 00	1 25	10	10	10	12	12	-	-	-	-
144	18	3 50	1 00	10	10	10	12	12	-	-	-	-
145	12	2 00	1 00	10	10	10	12	12	-	-	-	-
146	20	2 00	-	10	10	10	12	12	-	-	-	-
147	30	3 00	2 00	12	12	12	12	12	-	-	-	-
148	23	2 00	1 67	10	10	10	12	12	-	-	-	-
149	30	-	1 50	10	10	10	12	12	-	-	-	-
150	70	2 00	1 25	10	10	10	12	12	-	-	-	-
151	18	2 50	1 25	10	10	10	12	12	-	-	-	-
152	200	2 50	1 50	10	10	10	12	12	-	-	-	-
153	22	1 75	1 00	9	9	9	12	12	-	-	-	-
154	50	2 50	1 50	10	10	10	12	12	-	-	-	-
155	22	2 00	1 33	9	9	9	12	12	-	-	-	-
156	10	2 50	1 75	10	10	10	12	12	-	-	-	-
157	25	2 00	1 50	10	10	10	12	12	-	-	-	-
158	20	3 00	-	10	10	10	12	12	-	-	-	-
159	13	2 62	1 00	10	10	10	12	12	-	-	-	-
160	18	2 00	1 50	10	10	10	11	11	-	-	-	1

MACHINES AND MACHINERY.

No. 1	10	\$2 00	-	10	10	10	12	12	-	-	-	-
2	18	2 00	\$1 50	10	10	10	12	12	-	-	-	-
3	135	2 50	1 50	10	10	10	12	12	-	-	-	-
4	12	2 50	1 50	10	10	10	12	12	-	-	-	-
5	188	1 75	1 00	10	10	10	12	12	-	-	-	-
6	14	2 05	1 50	10	10	10	12	12	-	-	-	-
7	20	2 00	1 25	10	10	10	12	12	-	-	-	-
8	32	2 25	1 00	10	10	10	12	12	-	-	-	-
9	20	2 70	1 50	10	10	10	12	12	-	-	-	-
10	10	3 00	1 25	10	10	10	12	12	-	-	-	-

MACHINES AND MACHINERY — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 11	1,145	\$1 60	\$1 13	10	10	10	12	12	-	-	-	-
12	90	2 00	1 15	10	10	10	12	12	-	-	-	-
13	35	1 75	1 10	10	10	10	12	12	-	-	-	-
14	26	2 25	1 25	10	10	10	12	12	-	-	-	-
15	16	2 00	1 25	10	10	10	12	12	-	-	-	-
16	17	2 50	1 00	10	10	10	12	12	-	-	-	-
17	12	2 50	1 50	10	10	10	12	12	-	-	-	-
18	16	2 25	1 75	10	10	10	12	12	-	-	-	-
19	22	2 00	1 25	10	10	10	12	12	-	-	-	-
20	130	2 00	1 25	10	10	10	12	12	-	-	-	-
21	19	1 50	1 25	10	10	10	12	12	-	-	-	-
22	19	2 00	1 50	10	10	10	12	12	-	-	-	-
23	47	2 50	2 00	10	10	10	12	12	-	-	-	-
24	10	3 00	2 00	10	10	10	12	12	-	-	-	-
25	70	1 80	1 35	10	10	10	12	12	-	-	-	-
26	20	3 00	2 00	10	10	10	12	12	-	-	-	-
27	12	3 00	2 25	10	10	10	12	12	-	-	-	-
28	31	2 25	1 25	10	10	10	12	12	-	-	-	-
29	19	2 50	1 25	10	10	10	12	12	-	-	-	-
30	17	2 25	1 00	10	10	10	12	12	-	-	-	-
31	43	1 75	1 00	10	10	10	12	12	-	-	-	-
32	12	3 00	2 50	10	10	10	12	12	-	-	-	-
33	12	1 75	1 50	10	10	10	12	12	-	-	-	-
34	12	1 75	1 50	10	10	10	12	12	-	-	-	-
35	252	2 25	1 50	10	10	10	12	12	-	-	-	-
36	46	2 50	1 30	10	10	10	12	9	2	1	-	-
37	12	2 00	1 25	10	10	10	12	12	-	-	-	-
38	14	3 00	1 50	10	10	10	12	12	-	-	-	-
39	30	2 25	1 25	10	10	10	12	12	-	-	-	-
40	18	2 00	1 35	10	10	10	12	12	-	-	-	-
41	12	2 25	1 00	10	10	10	12	12	-	-	-	-
42	18	2 25	-	10	10	10	12	12	-	-	-	-
43	518	2 00	1 25	10	10	10	12	12	-	-	-	-
44	8	2 75	1 65	10	10	10	12	12	-	-	-	-
45	8	2 00	1 50	10	10	10	12	12	-	-	-	-
46	10	2 25	1 25	10	10	10	12	12	-	-	-	-
47	8	2 00	1 75	10	10	10	12	12	-	-	-	-
48	52	2 30	1 25	10	10	10	12	12	-	-	-	-
49	39	2 25	1 00	10	10	10	12	12	-	-	-	-
50	18	2 15	1 75	10	10	10	12	12	-	-	-	-
51	27	1 75	1 25	10	10	10	12	12	-	-	-	-
52	90	1 70	90	10	10	10	8	8	-	-	-	4
53	22	2 00	1 00	10	10	10	12	12	-	-	-	-
54	125	2 25	1 00	10	10	10	12	12	-	-	-	-
55	35	2 00	1 60	10	10	10	12	12	-	-	-	-
56	18	2 50	1 00	10	10	10	12	12	-	-	-	-
57	327	2 25	1 20	10	10	10	12	12	-	-	-	-
58	550	2 00	1 10	10	10	10	12	12	-	-	-	-
59	50	2 00	1 25	10	10	10	7	7	-	-	-	5
60	127	2 25	1 35	10	10	10	12	12	-	-	-	-
61	24	2 00	1 00	10	10	10	12	12	-	-	-	-
62	35	2 50	1 25	10	10	10	12	12	-	-	-	-
63	40	3 00	50	10	10	10	12	12	-	-	-	-
64	48	2 30	1 10	10	10	10	5	5	-	-	-	7
65	15	2 25	1 25	10	10	10	12	12	-	-	-	-
66	300	2 50	1 00	10	10	10	12	12	-	-	-	-
67	70	2 00	1 25	10	10	10	12	12	-	-	-	-
68	50	2 50	1 75	10	10	10	12	12	-	-	-	-
69	15	2 00	-	10	10	10	12	12	-	-	-	-
70	9	2 00	-	10	10	10	12	12	-	-	-	-

MACHINES AND MACHINERY — Continued.

ESTABLISHMENTS	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 71	20	\$2 50	\$1 50	10	10	10	12	12	-	-	-	-
72	34	2 50	1 50	10	10	10	12	12	-	-	-	-
73	50	2 40	1 40	10	10	10	12	12	-	-	-	-
74	24	2 50	1 75	10	8	9	12	6	6	-	-	-
75	75	2 50	1 50	10	10	10	12	12	-	-	-	-
76	32	2 30	1 40	10	10	10	12	12	-	-	-	-
77	10	2 00	1 25	10	10	10	12	12	-	-	-	-
78	38	2 50	1 00	10	10	10	12	12	-	-	-	-
79	250	2 46	1 50	10	10	10	12	12	-	-	-	-
80	70	2 45	1 25	10	10	10	12	12	-	-	-	-
81	25	2 50	-	10	10	10	12	12	-	-	-	-
82	27	2 25	1 00	10	10	10	12	12	-	-	-	-
83	50	2 50	1 25	10	10	10	12	12	-	-	-	-
84	75	2 50	1 25	10	10	10	12	12	-	-	-	-
85	53	2 37	1 83	10	10	10	12	12	-	-	-	-
86	155	2 75	1 50	10	10	10	12	12	-	-	-	-
87	32	2 25	1 67	10	10	10	12	12	-	-	-	-
88	12	2 50	2 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
89	8	2 75	-	10	10	10	12	12	-	-	-	-
90	350	2 75	2 25	10	10	10	12	12	-	-	-	-
91	10	2 50	1 50	10	10	10	12	12	-	-	-	-
92	8	2 75	2 00	10	10	10	12	12	-	-	-	-
93	100	2 50	1 50	10	10	10	12	12	-	-	-	-
94	20	2 50	1 50	10	10	10	12	12	-	-	-	-
95	20	3 00	1 50	10	10	10	12	12	-	-	-	-
26	9	2 50	1 50	10	10	10	12	12	-	-	-	-
97	65	3 00	2 00	10	10	10	12	12	-	-	-	-
98	5	2 25	-	10	10	10	12	8	4	-	-	-
99	100	2 75	1 50	10	10	10	12	12	-	-	-	-
100	12	2 25	2 00	10	10	10	12	12	-	-	-	-
101	85	2 25	1 50	10	10	10	9	9	-	-	-	3
102	26	2 25	1 50	10	10	10	12	12	-	-	-	-
103	15	2 50	-	10	10	10	12	12	-	-	-	-
104	15	2 50	1 50	10	10	10	12	12	-	-	-	-
105	10	2 00	-	10	10	10	12	12	-	-	-	-
106	15	2 50	-	10	10	10	12	12	-	-	-	-
107	9	2 50	-	10	10	10	12	12	-	-	-	-
108	35	2 50	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
109	45	2 00	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
110	75	4 00	2 00	10	10	10	12	12	-	-	-	-
111	16	5 00	2 00	10	10	10	12	12	-	-	-	-
112	10	2 75	-	10	10	10	12	12	-	-	-	-
113	18	2 50	-	10	10	10	12	12	-	-	-	-
114	10	2 50	-	10	10	10	12	12	-	-	-	-
115	12	2 50	-	10	10	10	12	12	-	-	-	-
116	15	2 25	1 25	10	10	10	12	12	-	-	-	-
117	16	2 00	1 25	10	10	10	12	12	-	-	-	-
118	8	2 48	-	10	10	10	10	10	-	-	-	2
119	30	2 25	1 50	10	10	10	12	12	-	-	-	-
120	118	2 50	1 25	10	10	10	12	12	-	-	-	-
121	12	2 25	-	10	10	10	12	12	-	-	-	-
122	30	3 50	1 67	10	10	10	12	12	-	-	-	-
123	18	2 25	-	10	10	10	12	12	-	-	-	-
124	12	2 50	-	10	10	10	12	12	-	-	-	-
125	8	2 25	-	10	10	10	12	12	-	-	-	-
126	10	2 00	1 50	10	10	10	12	12	-	-	-	-
127	300	2 50	1 50	10	10	10	12	12	-	-	-	-
128	125	2 50	2 00	10	10	10	12	12	-	-	-	-
129	155	2 50	1 53	10	10	10	12	12	-	-	-	-
130	18	2 00	1 50	10	10	10	12	12	-	-	-	-

MACHINES AND MACHINERY — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 131	45	\$2 10	\$1 35	10	10	10	12	12	-	-	-	-
132	265	1 90	1 00	10	10	10	12	12	-	-	-	-
133	60	2 00	1 50	10	10	10	12	12	-	-	-	-
134	21	3 00	2 00	10	10	10	12	12	-	-	-	-
135	51	3 00	1 50	10	10	10	12	12	-	-	-	-
136	150	2 25	1 25	10	10	10	12	12	-	-	-	-
137	760	2 00	1 10	10	10	10	12	12	-	-	-	-
138	75	2 40	1 30	11	11	11	12	12	-	-	-	-
139	170	2 50	1 50	10	10	10	12	12	-	-	-	-
140	40	2 50	1 75	11	11	11	12	12	-	-	-	-
141	200	2 50	1 25	10	10	10	12	12	-	-	-	-
142	200	2 50	1 50	10	10	10	12	12	-	-	-	-
143	50	2 50	1 25	10	10	10	12	12	-	-	-	-
144	120	2 25	1 40	10	10	10	12	12	-	-	-	-
145	561	2 37	1 25	10	10	10	12	12	-	-	-	-
146	56	2 30	1 50	10	10	10	12	12	-	-	-	-
147	44	1 90	1 25	10	10	10	12	12	-	-	-	-
148	44	3 00	1 75	10	10	10	12	12	-	-	-	-
149	325	2 35	1 25	10	10	10	12	12	-	-	-	-
150	12	2 50	1 75	10	10	10	12	12	-	-	-	-

METALS AND METALLIC GOODS.

No. 1	25	\$2 00	\$1 50	10	10	10	12	12	-	-	-	-
2	20	2 00	1 25	10	10	10	12	12	-	-	-	-
3	100	2 25	1 25	10	10	10	12	12	-	-	-	-
4	40	2 25	1 50	10	8	9	12	12	-	-	-	-
5	12	2 50	1 50	10	10	10	12	12	-	-	-	-
6	30	2 00	1 75	10	10	10	12	3	9	-	-	-
7	196	2 50	1 00	10	10	10	12	12	-	-	-	-
8	145	2 00	1 00	10	10	10	12	12	-	-	-	-
9	100	3 00	1 25	9 5-6	9 5-6	9 5-6	11	11	-	-	-	1
10	10	2 25	2 00	10	10	10	12	12	-	-	-	-
11	11	2 75	1 50	10	10	10	12	12	-	-	-	-
12	60	-	60	10	7	8 $\frac{1}{2}$	12	12	-	-	-	-
13	16	2 50	1 00	10	10	10	12	12	-	-	-	-
14	20	2 00	1 50	10	10	10	12	12	-	-	-	-
15	18	2 50	1 00	10	10	10	12	12	-	-	-	-
16	8	2 50	1 75	10	10	10	12	12	-	-	-	-
17	20	2 75	1 25	10	10	10	12	12	-	-	-	-
18	10	2 00	1 50	10	10	10	12	12	-	-	-	-
19	70	2 50	1 25	10	10	10	12	11	1	-	-	-
20	60	1 97	1 00	10	10	10	12	12	-	-	-	-
21	7	2 50	-	10	10	10	12	12	-	-	-	-
22	50	2 25	1 40	10	10	10	12	12	-	-	-	-
23	7	3 00	-	10	10	10	12	8	-	-	4	-
24	16	3 00	-	10	10	10	12	12	-	-	-	-
25	20	3 00	1 25	10	10	10	12	12	-	-	-	-
26	200	1 50	1 00	10	10	10	12	12	-	-	-	-
27	16	2 50	1 25	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
28	18	2 00	1 00	10	10	10	12	10	-	2	-	-
29	70	1 75	-	10	10	10	12	12	-	-	-	-
30	20	2 25	1 40	10	10	10	12	8	4	-	-	-

METALS AND METALLIC GOODS — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{1}{2}$ time.	$\frac{1}{4}$ time.	Idle.
No. 31	72	\$2 25	\$1 25	10	10	10	12	8	4	-	-	-
32	75	2 75	1 25	10	10	10	6	6	-	-	-	6
33	20	6 00	2 50	10	10	10	12	12	-	-	-	-
34	18	2 25	1 33	10	10	10	12	12	-	-	-	-
35	10	2 00	1 25	10	10	10	12	12	-	-	-	-
36	350	1 75	1 25	10	10	10	12	12	-	-	-	-
37	25	2 25	1 25	10	10	10	12	12	-	-	-	-
38	25	3 00	1 25	10	10	10	12	12	-	-	-	-
39	11	2 00	1 50	10	8	9	12	7	5	-	-	-
40	40	2 00	1 40	10	10	10	6	6	-	-	-	6
41	30	3 00	1 00	10	10	10	9	9	-	-	-	3
42	10	2 50	2 00	10	10	10	12	12	-	-	-	-
43	25	2 50	1 50	10	10	10	12	12	-	-	-	-
44	15	4 00	1 50	10	10	10	12	12	-	-	-	-
45	25	2 25	1 25	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
46	28	2 00	1 25	10	10	10	12	12	-	-	-	-
47	13	2 00	1 50	10	10	10	12	12	-	-	-	-
48	10	2 25	1 25	10	10	10	12	12	-	-	-	-
49	28	2 00	1 25	9	9	9	12	12	-	-	-	-
50	21	4 00	2 25	10	10	10	12	12	-	-	-	-
51	10	4 00	1 50	10	10	10	12	10	2	-	-	-
52	50	2 00	1 00	10	10	10	12	12	-	-	-	-
53	25	1 75	1 00	10	10	10	12	12	-	-	-	-
54	11	2 20	1 60	10	10	10	12	10	2	-	-	-
55	36	2 75	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
56	30	2 00	1 66	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
57	30	3 50	1 00	10	10	10	12	10	2	-	-	-
58	76	3 00	1 25	10	10	10	12	12	-	-	-	-
59	134	2 50	1 00	10	10	10	12	12	-	-	-	-
60	35	3 00	1 25	10	10	10	12	10	2	-	-	-
61	55	2 75	1 00	10	10	10	12	10	2	-	-	-
62	75	2 50	1 00	10	10	10	12	10	2	-	-	-
63	80	3 00	1 00	10	10	10	11	11	-	-	-	1
64	35	3 00	2 00	10	10	10	12	10	2	-	-	-
65	70	2 50	1 00	10	10	10	12	10	2	-	-	-
66	42	3 00	2 00	10	10	10	11	11	-	-	-	1
67	25	2 50	1 50	10	10	10	12	12	-	-	-	-
68	51	2 00	1 00	10	10	10	12	11	1	-	-	-
69	35	3 00	1 00	10	10	10	12	12	-	-	-	-
70	40	2 50	1 00	10	10	10	12	10	2	-	-	-
71	25	2 50	2 00	10	10	10	11	11	-	-	-	1
72	35	2 50	1 00	10	10	10	11	11	-	-	-	1
73	20	3 00	1 25	10	10	10	11	6	2	2	1	1
74	26	3 00	1 50	10	10	10	12	12	-	-	-	-
75	108	2 50	1 50	10	10	10	11	11	-	-	-	1
76	120	2 75	1 50	10	10	10	12	9	3	-	-	-
77	65	4 00	1 00	10	10	10	10	10	-	-	-	2
78	26	2 80	1 50	10	10	10	11	11	-	-	-	1
79	12	3 00	1 00	10	10	10	10	8	2	-	-	2
80	94	2 85	1 45	10	10	10	11	10	1	-	-	1
81	110	2 50	1 50	10	10	10	12	11	1	-	-	-
82	42	2 50	1 50	10	10	10	12	12	-	-	-	-
83	48	3 00	2 00	10	10	10	12	12	-	-	-	-
84	65	2 50	1 00	10	10	10	11	11	-	-	-	1
85	15	2 50	1 50	10	10	10	12	7	-	5	-	-
86	45	3 00	1 00	10	10	10	11	9	2	-	-	1
87	45	2 50	1 00	10	10	10	12	11	1	-	-	-
88	65	2 25	1 00	10	10	10	11	11	-	-	-	1
89	39	2 50	1 00	10	10	10	12	12	-	-	-	-
90	10	2 50	1 75	10	10	10	12	12	-	-	-	-

METALS AND METALLIC GOODS—Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 91	14	\$2 50	\$1 00	10	10	10	12	12	-	-	-	1
92	75	3 00	1 00	10	11	10 $\frac{1}{2}$	11	11	-	-	-	-
93	63	2 50	1 25	10	10	10	12	12	-	-	-	-
94	31	2 50	1 50	10	10	10	11	11	-	-	-	1
95	80	2 50	1 50	10	10	10	12	12	-	-	-	-
96	30	2 50	1 50	10	10	10	11	10	1	-	-	1
97	19	3 00	2 00	10	10	10	12	10	2	-	-	-
98	26	3 00	1 50	10	10	10	11	10	-	-	1	1
99	75	2 75	1 75	10	10	10	11	11	-	-	-	1
100	23	3 00	1 00	10	10	10	12	12	-	-	-	-
101	50	2 50	1 50	10	10	10	12	12	-	-	-	-
102	55	2 50	1 00	10	10	10	12	12	-	-	-	-
103	125	3 00	1 50	8	8	8	12	12	-	-	-	-
104	549	2 00	1 15	8 $\frac{1}{2}$	8 $\frac{1}{2}$	8 $\frac{1}{2}$	11	11	-	-	-	1
105	20	2 00	1 00	10	10	10	12	12	-	-	-	-
106	40	2 25	1 15	10	10	10	12	12	-	-	-	-
107	11	2 50	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
108	63	2 50	1 25	10	10	10	12	9	-	3	-	-
109	50	2 60	1 25	9	9	9	12	7	4	-	1	-
110	77	1 80	-	10	10	10	10	10	-	-	-	2
111	100	2 80	1 25	10	10	10	12	12	-	-	-	-
112	14	2 50	1 25	10	8	9	12	6	6	-	-	-
113	20	2 50	1 25	10	9	9 $\frac{1}{2}$	12	6	6	-	-	-
114	100	2 00	1 00	10	10	10	12	12	-	-	-	-
115	23	2 50	1 00	10	10	10	12	12	-	-	-	-
116	180	2 25	1 20	10	10	10	10 $\frac{1}{2}$	10 $\frac{1}{2}$	-	-	-	1 $\frac{1}{2}$
117	35	4 00	1 75	10	9	9 $\frac{1}{2}$	10	6	-	4	-	2
118	300	1 75	1 10	10	10	10	10	10	-	-	-	2
119	710	2 50	1 25	10	10	10	12	12	-	-	-	-
120	163	2 25	1 00	11	11	11	12	12	-	-	-	-
121	88	3 00	1 00	10	10	10	12	12	-	-	-	-
122	33	3 00	75	10	10	10	12	11	-	-	1	-
123	314	3 25	1 00	10	10	10	12	5	-	7	-	-
124	58	2 25	1 00	10	10	10	12	-	12	-	-	-
125	40	1 90	75	10	10	10	12	12	-	-	-	-
126	115	3 00	1 50	10	10	10	12	12	-	-	-	-
127	300	2 25	1 00	10	10	10	12	12	-	-	-	-
128	25	2 25	1 25	10	10	10	12	12	-	-	-	-
129	19	3 75	1 50	10	10	10	12	12	-	-	-	-
130	60	3 00	1 33	10	10	10	12	11	-	-	1	-
131	50	2 25	1 62	10	10	10	12	12	-	-	-	-
132	8	2 25	1 50	10	8	9	12	12	-	-	-	-
133	50	2 50	1 75	10	10	10	12	12	-	-	-	-
134	20	1 75	1 25	10	10	10	12	12	-	-	-	-
135	60	2 25	1 50	10	10	10	12	12	-	-	-	-
136	20	2 25	1 68	10	10	10	12	12	-	-	-	-
137	18	2 25	1 50	10	10	10	12	12	-	-	-	-
138	10	1 75	-	10	10	10	12	12	-	-	-	-
139	100	2 25	1 25	10	10	10	12	12	-	-	-	-
140	14	2 00	-	10	10	10	12	12	-	-	-	-
141	70	2 50	1 00	10	10	10	12	12	-	-	-	-
142	125	2 50	1 50	10	10	10	12	12	-	-	-	-
143	22	3 50	-	10	10	10	12	12	-	-	-	-
144	15	2 25	1 50	10	10	10	12	12	-	-	-	-
145	60	3 25	1 50	10	10	10	12	12	-	-	-	-
146	21	1 50	-	10	10	10	12	12	-	-	-	-
147	86	2 00	1 20	10	10	10	12	12	-	-	-	-
148	605	3 02	1 38	9 1-6	9 1-6	9 1-6	11 $\frac{1}{2}$	11 $\frac{1}{2}$	-	-	-	$\frac{1}{2}$
149	105	4 50	1 75	9 1-6	9 1-6	9 1-6	11 $\frac{1}{2}$	11 $\frac{1}{2}$	-	-	-	$\frac{1}{2}$
150	410	3 50	1 50	8 $\frac{3}{4}$	8 $\frac{3}{4}$	8 $\frac{3}{4}$	11 $\frac{1}{2}$	11 $\frac{1}{2}$	-	-	-	$\frac{1}{2}$

METALS AND METALLIC GOODS — Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 151	45	\$2 00	\$1 37	10	10	10	12	12	-	-	-	-
152	60	2 25	1 50	10	10	10	12	12	-	-	-	-
153	17	2 25	1 75	10	10	10	12	12	-	-	-	-
154	30	2 00	1 50	10	10	10	12	12	-	-	-	-
155	20	2 50	1 00	10	10	10	12	12	-	-	-	-
156	29	3 00	-	10	10	10	12	12	-	-	-	-
157	25	2 00	-	10	10	10	12	12	-	-	-	-
158	13	2 50	1 50	10	10	10	12	12	-	-	-	-
159	14	2 25	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
160	9	2 20	1 67	10	10	10	12	12	-	-	-	-
161	10	2 33	2 00	10	10	10	12	12	-	-	-	-
162	40	2 50	1 50	10	10	10	12	12	-	-	-	-
163	18	2 50	-	10	10	10	9	9	-	-	-	3
164	11	2 50	1 75	11	11	11	12	10	2	-	-	-
165	32	2 50	1 50	10	10	10	12	12	-	-	-	-
166	15	1 95	-	10	10	10	12	12	-	-	-	-
167	40	2 50	1 25	10	10	10	12	12	-	-	-	-
168	180	3 00	1 25	10	10	10	10	10	-	-	-	2
169	39	2 25	1 33	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
170	28	2 50	1 50	10	9	9 $\frac{1}{2}$	12	10	2	-	-	-
171	94	2 75	1 50	10	10	10	10	10	-	-	-	2
172	22	3 50	1 50	10	10	10	12	12	-	-	-	-
173	100	2 50	1 25	10	10	10	12	12	-	-	-	-
174	65	2 50	1 00	10	10	10	12	12	-	-	-	-
175	20	2 25	1 33	10	10	10	12	12	-	-	-	-
176	28	2 50	1 50	10	10	10	12	12	-	-	-	-
177	14	2 50	1 50	10	10	10	12	12	-	-	-	-
178	11	2 25	1 50	10	11	10 $\frac{1}{2}$	12	12	-	-	-	-
179	12	2 50	1 00	10	10	10	12	12	-	-	-	-
180	10	2 00	1 50	10	10	10	12	12	-	-	-	-
181	12	6 00	-	8	8	8	12	12	-	-	-	-
182	53	2 40	1 39	10	10	10	12	12	-	-	-	-
183	12	3 00	1 25	10	10	10	12	12	-	-	-	-
184	13	2 25	-	10	10	10	12	12	-	-	-	-
185	10	2 75	1 75	10	10	10	12	12	-	-	-	-
181	44	2 00	1 50	10	10	10	12	12	-	-	-	-
187	90	2 75	1 50	10	10	10	12	12	-	-	-	-
188	40	2 25	1 00	10	10	10	12	12	-	-	-	-
189	8	2 00	-	10	10	10	12	12	-	-	-	-
190	20	2 00	-	10	10	10	12	12	-	-	-	-
191	9	3 00	2 00	10	10	10	12	9	-	-	3	-
192	13	3 00	-	9	9	9	12	12	-	-	-	-
193	8	2 00	-	10	10	10	12	12	-	-	-	-
194	15	3 00	1 25	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
195	11	2 00	1 50	10	10	10	12	12	-	-	-	-
196	32	2 00	1 00	10	10	10	12	12	-	-	-	-
197	36	2 00	1 00	10	10	10	12	12	-	-	-	-
198	34	2 50	1 50	10	10	10	12	12	-	-	-	-
199	39	1 87	-	10	10	10	12	12	-	-	-	-
200	13	2 12	1 50	8	8	8	12	12	-	-	-	-
201	90	2 50	1 00	10	10	10	11	11	-	-	-	1
202	11	3 00	2 00	10	10	10	12	12	-	-	-	-
203	8	2 50	2 00	10	10	10	12	12	-	-	-	-
204	24	2 00	1 00	10	10	10	12	12	-	-	-	-
205	50	3 50	1 25	10	10	10	12	12	-	-	-	-
206	35	2 50	1 00	10	10	10	11	11	-	-	-	1
207	10	2 50	1 00	10	10	10	12	12	-	-	-	-
208	7	2 50	1 67	10	10	10	12	12	-	-	-	-
209	38	2 75	1 50	10	10	10	12	12	-	-	-	-
210	11	2 50	1 50	10	10	10	12	12	-	-	-	-

METALS AND METALLIC GOODS — Concluded.

ESTABLISHMENTS.	Average number of employees.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 211	12	\$3 50	\$1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
212	20	1 67	1 00	10	10	10	12	12	-	-	-	-
213	16	1 25	1 12	10	10	10	12	8	3	1	-	-
214	18	1 00	67	10	10	10	12	12	-	-	-	-
215	50	2 00	1 00	10	10	10	12	12	-	-	-	-
216	40	3 00	2 50	10	10	10	12	12	-	-	-	-
217	20	2 00	1 00	10	10	10	9	9	-	-	-	3
218	64	2 25	1 25	10	10	10	12	12	-	-	-	-
219	8	2 50	1 25	10	10	10	12	12	-	-	-	-
220	21	3 00	2 00	10	11	10 $\frac{1}{2}$	12	12	-	-	-	-
221	23	3 50	2 00	10	10	10	12	12	-	-	-	-
222	10	2 50	1 50	10	10	10	12	12	-	-	-	-
223	40	2 50	1 75	10	8	9	12	12	-	-	-	-
224	40	2 25	1 50	9	9	9	12	12	-	-	-	-
225	35	2 50	1 50	9	10	9 $\frac{1}{2}$	12	12	-	-	-	-
226	15	2 50	1 75	10	10	10	12	12	-	-	-	-
227	15	2 50	1 00	10	10	10	12	12	-	-	-	-
228	60	3 00	1 50	10	10	10	12	12	-	-	-	-
229	14	2 50	2 00	10	10	10	12	12	-	-	-	-
230	10	2 50	1 50	8	8	8	12	12	-	-	-	-
231	18	3 00	1 00	10	10	10	12	8	4	-	-	-
232	24	3 00	1 50	9	9	9	12	12	-	-	-	-
233	80	3 00	75	10	10	10	12	12	-	-	-	-
234	11	2 25	1 50	10	10	10	12	12	-	-	-	-
235	204	2 75	1 00	10	10	10	11	11	-	-	-	1
236	28	2 25	1 00	10	10	10	12	12	-	-	-	-
237	10	2 50	-	8	10	9	12	4	4	-	4	-
238	20	4 00	2 00	9	9	9	12	12	-	-	-	-
239	25	3 00	1 00	10	10	10	12	12	-	-	-	-
240	30	2 25	1 50	10	10	10	12	-	-	12	-	-
241	185	2 00	1 25	10	10	10	12	12	-	-	-	-
242	46	2 50	1 25	10	10	10	12	12	-	-	-	-
243	12	3 50	1 50	10	10	10	12	12	-	-	-	-
244	115	1 75	1 50	10	10	10	12	12	-	-	-	-
245	135	2 00	75	10	10	10	12	12	-	-	-	-
246	60	1 80	1 30	10	10	10	12	12	-	-	-	-
247	75	2 00	1 25	10	10	10	12	12	-	-	-	-
248	2,300	2 50	1 35	10	10	10	12	12	-	-	-	-
249	90	2 50	1 40	10	10	10	12	12	-	-	-	-
250	17	2 75	2 00	10	10	10	12	12	-	-	-	-
251	45	2 75	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
252	38	2 83	1 42	10	10	10	4	4	-	-	-	8
253	130	2 25	-	10	10	10	12	12	-	-	-	-
254	22	2 00	1 50	10	10	10	12	12	-	-	-	-
255	15	2 25	-	9	9	9	12	12	-	-	-	-
256	16	2 75	2 00	10	10	10	12	12	-	-	-	-
257	224	2 50	1 37	8	8	8	5	5	-	-	-	7
258	25	2 50	1 50	10	10	10	4	4	-	-	-	8
259	33	2 50	1 00	10	10	10	10	10	-	-	-	2
260	400	2 00	1 25	10	10	10	12	12	-	-	-	-
261	100	2 50	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
262	70	2 00	1 10	9 5-6	9 5-6	9 5-6	9	9	-	-	-	3
263	65	3 00	1 50	10	10	10	12	12	-	-	-	-
264	90	2 42	1 28	10	10	10	12	12	-	-	-	-
265	215	5 00	1 00	10	10	10	12	7	-	-	5	-
266	95	6 00	2 00	10	10	10	12	12	-	-	-	-
267	200	2 25	1 10	11	11	11	11	11	-	-	-	1
268	125	2 25	1 10	10	10	10	11	11	-	-	-	1
269	150	2 25	1 00	10	10	10	12	12	-	-	-	-
270	80	1 60	1 25	11	10	10 $\frac{1}{2}$	12	12	-	-	-	-

MUSICAL INSTRUMENTS.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 1	242	\$2 45	\$1 44	10	10	10	12	12	-	-	-	-
2	26	2 50	1 00	10	10	10	12	12	-	-	-	-
3	340	2 75	1 25	10	10	10	12	12	-	-	-	-
4	115	2 50	1 50	10	10	10	12	12	-	-	-	-
5	14	3 00	1 50	10	10	10	12	12	-	-	-	-
6	30	2 00	-	10	10	10	12	12	-	-	-	-
7	8	2 50	1 00	10	10	10	10	10	-	-	-	2
8	12	3 00	-	10	10	10	12	12	-	-	-	-
9	20	2 30	-	10	10	10	12	12	-	-	-	-
10	80	3 50	1 50	10	10	10	9	9	-	-	-	3
11	150	3 00	1 75	10	10	10	12	12	-	-	-	-
12	12	2 75	-	10	10	10	12	12	-	-	-	-
13	35	2 50	1 25	10	9	9 $\frac{1}{2}$	12	6	-	3	3	-
14	214	2 50	1 50	10	9	9 $\frac{1}{2}$	12	10	2	-	-	-
15	15	2 50	1 75	10	10	10	12	12	-	-	-	-
16	28	3 50	1 50	10	10	10	12	12	-	-	-	-
17	150	3 00	1 50	10	10	10	12	12	-	-	-	-
18	30	3 00	2 00	10	10	10	12	12	-	-	-	-
19	50	3 00	2 00	10	9	9 $\frac{1}{2}$	12	10	-	-	2	-
20	460	3 50	1 80	10	10	10	12	12	-	-	-	-
21	75	3 00	2 00	9	9	9	12	12	-	-	-	-
22	16	2 25	1 50	9	8	8 $\frac{1}{2}$	12	10	-	2	-	-
23	20	2 50	1 50	10	10	10	12	12	-	-	-	-
24	13	2 50	-	10	10	10	12	12	-	-	-	-
25	15	2 50	1 75	10	10	10	12	12	-	-	-	-
26	18	3 00	1 75	10	10	10	12	12	-	-	-	-
27	15	2 00	-	10	10	10	12	12	-	-	-	-
28	60	2 00	1 50	10	10	10	12	12	-	-	-	-
29	32	2 50	1 25	10	10	10	12	12	-	-	-	-
30	55	3 00	2 50	8	9	8 $\frac{1}{2}$	12	12	-	-	-	-
31	20	4 00	2 50	10	10	10	12	12	-	-	-	-
32	20	3 00	-	10	10	10	12	12	-	-	-	-
33	17	2 00	1 50	10	10	10	12	12	-	-	-	-
34	22	3 00	2 00	10	10	10	12	12	-	-	-	-
35	135	3 00	1 25	10	10	10	12	12	-	-	-	-
36	85	1 50	1 37	10	10	10	12	12	-	-	-	-
37	90	2 50	1 25	10	10	10	12	12	-	-	-	-
38	28	2 20	-	10	10	10	12	12	-	-	-	-
39	17	2 50	1 50	10	10	10	12	12	-	-	-	-
40	37	1 50	1 00	10	10	10	12	12	-	-	-	-

PAPER.

No. 1	42	\$2 00	\$1 30	10	10	10	12	12	-	-	-	-
2	16	-	1 50	10	10	10	11	11	-	-	-	1
3	17	1 25	1 10	10	10	10	11	11	-	-	-	1
4	10	2 18	1 25	10	10	10	12	12	-	-	-	-
5	10	2 00	1 50	10	10	10	12	-	9	-	3	-
6	135	2 50	1 25	10	10	10	12	12	-	-	-	-
7	20	2 00	1 50	10	10	10	11	9	2	-	-	1
8	38	2 00	1 25	11	11	11	12	12	-	-	-	-
9	250	2 00	1 25	10	10	10	12	12	-	-	-	-
10	50	1 90	87	12	12	12	11	9	-	-	2	1

PAPER — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 11	30	\$1 25	\$1 00	9	9	9	12	12	-	-	-	-
12	19	-	1 25	10	10	10	11	11	-	-	-	1
13	40	2 00	1 50	10	10	10	12	12	-	-	-	-
14	73	1 33	1 25	10	10	10	12	10	-	-	2	-
15	86	1 75	1 25	10	10	10	12	12	-	-	-	-
16	117	2 25	1 25	10	10	10	12	12	-	-	-	-
17	100	2 00	1 25	10	10	10	12	12	-	-	-	-
18	39	1 75	1 42	10	10	10	12	12	-	-	-	-
19	29	2 50	1 25	10	10	10	12	10	-	-	2	-
20	25	-	1 25	10	10	10	12	5	6	-	1	-
21	22	-	1 00	10	10	10	12	12	-	-	-	-
22	15	1 50	1 25	11	11	11	12	12	-	-	-	-
23	38	1 50	1 25	10	10	10	12	12	-	-	-	-
24	135	1 25	1 25	10	10	10	12	12	-	-	-	-
25	250	1 75	1 33	10	10	10	12	12	-	-	-	-
26	39	1 10	1 10	12	12	12	12	12	-	-	-	-
27	16	1 50	1 25	10	10	10	12	12	-	-	-	-
28	24	1 25	1 00	12	11	11 $\frac{1}{2}$	12	12	-	-	-	-
29	285	2 00	1 13	10	10	10	12	12	-	-	-	-
30	96	2 00	1 25	10 $\frac{1}{2}$	10	10 $\frac{1}{4}$	12	10	1	-	1	-
31	90	1 75	1 25	12	12	10	12	12	-	-	-	-
32	20	2 08	1 25	12	12	10	12	12	-	-	-	-
33	22	1 65	1 25	12	12	12	12	12	-	-	-	-
34	76	-	1 50	10	10	10	12	12	-	-	-	-
35	28	2 00	1 00	10	10	10	12	12	-	-	-	-
36	130	2 00	1 10	10	10	10	12	12	-	-	-	-
37	290	-	1 25	10	10	10	12	12	-	-	-	-
38	229	1 75	1 25	10	10	10	12	12	-	-	-	-
39	120	1 87	1 21	10	10	10	12	11	-	-	1	-
40	175	2 00	1 35	10	10	10	11	11	-	-	-	1
41	155	1 50	1 12	10	10	10	11	11	-	-	-	1
42	121	2 00	1 10	10	10	10	12	12	-	-	-	-
43	151	2 00	1 25	10	10	10	12	12	-	-	-	-
44	58	1 35	1 10	10	10	10	12	12	-	-	-	-
45	20	2 00	1 37	10	10	10	7	7	-	-	-	5
46	50	1 50	1 25	19	10	10	11	11	-	-	-	1
47	234	1 50	1 12	10	10	10	12	12	-	-	-	-
48	114	1 45	1 10	10	10	10	12	12	-	-	-	-
49	10	-	1 25	10	10	10	12	12	-	-	-	-
50	473	2 00	1 35	10	10	10	12	12	-	-	-	-
51	75	1 51	1 10	10	10	10	12	12	-	-	-	-
52	100	1 50	1 00	10	9	9 $\frac{1}{2}$	11	11	-	-	-	1
53	153	1 75	1 00	10	10	10	12	12	-	-	-	-
54	200	3 00	1 25	10	10	10	12	12	-	-	-	-
55	30	3 00	1 25	10	10	10	12	12	-	-	-	-
56	25	4 00	1 50	10	10	10	12	12	-	-	-	-
57	350	2 50	1 25	10	10	10	12	12	-	-	-	-
58	48	2 75	1 10	10	10	10	12	12	-	-	-	-
59	40	2 00	1 00	10	10	10	12	12	-	-	-	-
60	88	1 75	1 25	10	10	10	12	11	-	-	1	-
61	12	-	1 25	10	10	10	12	12	-	-	-	-
62	82	2 00	1 00	10	10	10	12	12	-	-	-	-
63	77	2 25	1 50	10	10	10	7	7	-	-	-	5
64	174	1 75	1 00	10	10	10	10	10	-	-	-	2
65	60	3 50	1 67	9	9	9	12	12	-	-	-	-
66	35	2 15	1 50	10	10	10	12	12	-	-	-	-
67	80	3 50	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
68	15	2 50	1 25	10	10	10	12	12	-	-	-	-
69	38	2 50	1 50	9	9	9	12	12	-	-	-	-
70	40	1 00	60	10	10	10	12	12	-	-	-	-

PRINTING AND PUBLISHING.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 1	524	\$3 33	\$1 50	10	10	10	12	12	-	-	-	-
2	57	3 00	1 00	10	10	10	12	12	-	-	-	-
3	125	2 50	1 25	10	10	10	12	12	-	-	-	-
4	285	2 50	1 00	10	10	10	12	12	-	-	-	-
5	37	2 00	1 25	10	10	10	12	12	-	-	-	-
6	48	2 00	75	10	10	10	12	12	-	-	-	-
7	27	2 00	1 00	10	10	10	12	12	-	-	-	-
8	17	2 00	1 50	10	10	10	12	12	-	-	-	-
9	24	2 50	1 00	10	10	10	12	12	-	-	-	-
10	23	2 00	1 25	10	10	10	6	6	-	-	-	6
11	12	1 50	1 00	10	10	10	12	12	-	-	-	-
12	11	2 00	1 50	9	9	9	12	12	-	-	-	-
13	10	1 75	1 00	10	10	10	12	12	-	-	-	-
14	10	2 50	2 00	10	10	10	12	12	-	-	-	-
15	17	2 00	-	10	10	10	12	12	-	-	-	-
16	20	2 00	1 00	10	10	10	12	12	-	-	-	-
17	21	2 00	1 25	10	10	10	12	12	-	-	-	-
18	18	2 00	1 50	8	8	8	12	12	-	-	-	-
19	27	2 50	1 50	10	10	10	12	12	-	-	-	-
20	32	3 00	1 25	10	10	10	12	12	-	-	-	-
21	27	2 50	60	10	10	10	12	12	-	-	-	-
22	18	2 00	1 00	10	10	10	12	12	-	-	-	-
23	16	1 50	1 25	10	10	10	12	12	-	-	-	-
24	60	3 50	-	9	9	9	12	12	-	-	-	-
25	152	2 30	1 00	10	10	10	12	12	-	-	-	-
26	31	2 75	1 25	10	10	10	12	12	-	-	-	-
27	18	3 00	1 00	10	10	10	12	12	-	-	-	-
28	16	2 25	1 00	10	10	10	12	12	-	-	-	-
29	20	2 50	75	10	10	10	12	12	-	-	-	-
30	25	4 00	2 50	8	8	8	12	12	-	-	-	-
31	11	2 50	1 50	10	10	10	12	12	-	-	-	-
32	33	2 50	1 00	10	10	10	6	6	-	-	-	6
33	18	2 50	1 50	9	9	9	12	12	-	-	-	-
34	60	2 50	1 00	10	10	10	6	6	-	-	-	6
35	110	2 50	1 00	10	10	10	12	5	7	-	-	-
36	100	1 50	75	10	10	10	12	12	-	-	-	-
37	13	3 00	1 50	10	10	10	12	12	-	-	-	-
38	38	2 00	50	10	10	10	12	12	-	-	-	-
39	15	3 00	1 50	10	10	10	12	12	-	-	-	-
40	25	2 50	1 00	10	10	10	12	12	-	-	-	-
41	20	2 50	1 50	9	9	9	12	12	-	-	-	-
42	35	2 84	-	9	9	9	12	12	-	-	-	-
43	27	2 25	-	10	10	10	12	12	-	-	-	-
44	26	2 83	-	10	10	10	12	12	-	-	-	-
45	14	2 50	1 50	9	9	9	10	10	-	-	-	2
46	10	3 00	2 00	9	9	9	12	12	-	-	-	-
47	25	2 50	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
48	136	3 33	1 50	10	10	10	12	12	-	-	-	-
49	270	2 75	1 00	10	10	10	12	12	-	-	-	-
50	90	4 00	2 00	10	10	10	12	12	-	-	-	-
51	60	3 00	1 00	10	10	10	12	12	-	-	-	-
52	5	4 00	3 00	8	8	8	12	12	-	-	-	-
53	14	2 75	1 50	10	10	10	12	12	-	-	-	-
54	11	2 50	1 50	10	10	10	12	12	-	-	-	-
55	20	2 00	75	10	10	10	12	12	-	-	-	-
56	30	3 00	1 50	10	10	10	12	12	-	-	-	-
57	30	2 50	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
58	8	2 00	-	9	9	9	12	12	-	-	-	-
59	100	3 00	-	10	10	10	12	12	-	-	-	-
60	50	3 00	1 00	10	10	10	12	10	-	-	2	-

PRINTING AND PUBLISHING — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 61	80	\$3 00	-	10	10	10	12	12	-	-	-	-
62	75	2 00	\$1 25	10	10	10	12	9	-	-	3	-
63	15	2 25	1 75	10	10	10	12	12	-	-	-	-
64	35	2 50	1 75	9	9	9	12	12	-	-	-	-
65	20	2 30	1 00	10	10	10	12	12	-	-	-	-
66	24	2 50	1 00	9	9	9	12	12	-	-	-	-
67	35	2 50	1 50	10	10	10	12	12	-	-	-	-
68	18	3 50	1 50	9	8	8 $\frac{1}{2}$	12	12	-	-	-	-
69	63	2 50	2 00	10	10	10	12	12	-	-	-	-
70	57	2 00	1 00	10	10	10	12	12	-	-	-	-
71	12	2 50	1 33	9	9	9	12	12	-	-	-	-
72	19	2 50	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
73	18	3 50	2 00	10	10	10	12	12	-	-	-	-
74	14	3 00	1 00	10	10	10	12	12	-	-	-	-
75	14	2 67	1 00	10	10	10	12	12	-	-	-	-
76	12	2 00	1 50	10	10	10	12	12	-	-	-	-
77	12	2 50	1 50	10	10	10	12	12	-	-	-	-
78	75	2 50	1 75	9	9	9	12	12	-	-	-	-
79	17	2 50	1 00	9	9	9	12	12	-	-	-	-
80	12	2 75	1 50	10	10	10	12	12	-	-	-	-
81	130	2 50	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
82	36	3 00	1 50	9	9	9	12	12	-	-	-	-
83	100	2 25	1 50	10	10	10	12	12	-	-	-	-
84	20	1 75	1 00	10	10	10	12	12	-	-	-	-
85	20	2 50	1 50	10	10	10	12	12	-	-	-	-
86	10	2 50	1 50	9	9	9	12	12	-	-	-	-
87	17	2 50	1 25	10	10	10	12	12	-	-	-	-
88	33	3 00	1 66	9	9	9	12	8	1	1	2	-
89	300	3 00	2 00	9	9	9	12	12	-	-	-	-
90	14	2 50	1 50	10	10	10	12	12	-	-	-	-
91	60	3 00	1 00	10	10	10	12	12	-	-	-	-
92	450	3 00	1 00	10	10	10	12	12	-	-	-	-
93	15	3 00	1 00	10	10	10	12	12	-	-	-	-
94	10	2 00	-	10	10	10	12	12	-	-	-	-
95	6	3 00	2 00	10	10	10	12	12	-	-	-	-
96	30	2 50	1 00	10	10	10	12	12	-	-	-	-
97	30	2 50	1 25	10	10	10	12	12	-	-	-	-
98	60	3 25	-	10	10	10	12	12	-	-	-	-
99	22	2 00	1 75	10	10	10	12	12	-	-	-	-
100	100	2 85	2 50	10	10	10	12	12	-	-	-	-

RUBBER AND ELASTIC GOODS.

No. 1	200	\$3 00	\$1 12	10	10	10	12	11	-	-	1	-
2	16	2 50	1 25	10	10	10	12	12	-	-	-	-
3	48	-	-	10	10	10	12	12	-	-	-	-
4	103	-	-	10	10	10	12	12	-	-	-	-
5	39	-	-	10	10	10	9	9	-	-	-	3
6	60	2 00	1 25	9	9	9	12	12	-	-	-	-
7	16	2 00	1 75	10	10	10	12	12	-	-	-	-
8	75	2 25	1 45	10	10	10	12	12	-	-	-	-
9	125	1 55	1 20	10	10	10	12	12	-	-	-	-
10	50	1 50	1 00	10	10	10	12	12	-	-	-	-

RUBBER AND ELASTIC GOODS—Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 11	130	\$2 00	\$1 00	10	10	10	12	12	-	-	-	-
12	80	2 00	1 00	9	8	8 $\frac{1}{2}$	8	8	-	-	-	4
13	235	2 00	1 00	10	10	10	12	12	-	-	-	-
14	48	1 60	50	10	10	10	12	12	-	-	-	-
15	122	-	-	10	10	10	12	12	-	-	-	-
16	235	-	-	10	10	10	12	12	-	-	-	-
17	207	1 80	1 00	10	10	10	12	12	-	-	-	-
18	411	2 50	1 25	10	10	10	12	12	-	-	-	-
19	40	1 75	1 25	11	10	10 $\frac{1}{2}$	12	12	-	-	-	-
20	73	3 00	75	10	10	10	12	12	-	-	-	-
21	35	2 00	1 00	8	8	8	12	12	-	-	-	-
22	23	2 00	1 25	10	10	10	12	12	-	-	-	-
23	45	2 00	1 25	10	10	10	12	12	-	-	-	-
24	213	2 65	1 30	10	10	10	12	12	-	-	-	-
25	15	2 00	1 25	10	10	10	12	12	-	-	-	-

STONE.

No. 1	5	\$3 00	-	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
2	22	2 25	\$1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
3	10	2 50	1 50	10	8	9	12	8	4	-	-	-
4	8	2 25	2 00	10	8	9	12	12	-	-	-	-
5	20	2 50	1 00	10	8	9	12	12	-	-	-	-
6	20	2 00	1 25	10	10	10	10	9	-	-	1	2
7	14	2 25	-	10	10	10	12	12	-	-	-	-
8	15	1 75	1 25	10	9	9 $\frac{1}{2}$	12	11	-	-	1	-
9	10	3 00	2 00	10	8	9	12	6	-	6	-	-
10	17	2 00	1 75	10	8	9	12	12	-	-	-	-
11	15	2 25	1 00	10	10	10	12	12	-	-	-	-
12	6	3 25	2 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
13	25	2 50	1 00	10	10	10	12	12	-	-	-	-
14	21	2 50	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
15	30	2 50	1 50	10	10	10	12	12	-	-	-	-
16	20	2 25	-	10	10	10	12	12	-	-	-	-
17	79	3 00	1 66	9	10	9 $\frac{1}{2}$	12	10	2	-	-	-
18	6	4 00	2 50	10	8	9	12	12	-	-	-	-
19	15	2 50	1 50	10	10	10	12	12	-	-	-	-
20	30	3 00	1 50	9	9	9	12	12	-	-	-	-
21	30	2 00	1 00	9	9	9	12	12	-	-	-	-
22	23	2 50	2 00	9	9	9	9	9	-	-	-	3
23	7	2 50	1 75	10	8	9	12	12	-	-	-	-
24	60	2 25	1 00	10	10	10	12	12	-	-	-	-
25	190	2 50	1 50	10	9	9 $\frac{1}{2}$	8	8	-	-	-	4
26	27	2 50	1 50	10	10	10	12	12	-	-	-	-
27	130	1 60	-	10	10	10	12	12	-	-	-	-
28	20	1 75	1 33	10	10	10	12	12	-	-	-	-
29	150	1 75	1 25	10	10	10	12	12	-	-	-	-
30	15	2 50	1 50	10	8	9	12	12	-	-	-	-
31	160	2 00	1 25	10	8	9	12	7	5	-	-	-
32	45	2 50	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
33	50	2 50	1 50	10	9	9 $\frac{1}{2}$	6	6	-	-	-	6
34	20	2 50	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
35	20	2 50	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
36	50	2 50	1 50	10	9	9 $\frac{1}{2}$	6	6	-	-	-	6
37	50	2 00	1 50	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
38	15	2 50	2 00	10	9	9 $\frac{1}{2}$	12	8	4	-	-	-
39	10	2 50	2 00	10	8	9	12	8	4	-	-	-
40	9	2 50	2 00	10	9	9 $\frac{1}{2}$	12	8	4	-	-	-

TOBACCO.

ESTABLISHMENTS.	Average number of employees.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 1	19	\$2 25	\$1 50	8	8	8	12	12	-	-	-	-
2	7	2 50	1 50	10	10	10	12	12	-	-	-	-
3	20	1 50	1 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
4	45	2 50	1 30	10	10	10	12	12	-	-	-	-
5	35	2 00	1 00	10	10	10	12	12	-	-	-	-
6	4	1 50	1 16	10	10	10	12	12	-	-	-	-
7	24	3 00	2 00	10	10	10	12	12	-	-	-	-
8	80	2 00	1 25	10	10	10	12	12	-	-	-	-
9	10	2 50	1 50	10	10	10	12	12	-	-	-	-
10	104	2 00	1 00	10	12	11	12	12	-	-	-	-
11	17	1 66	50	10	10	10	12	12	-	-	-	-
12	60	2 00	1 37	9	9	9	8	8	-	-	-	4
13	15	2 50	2 00	9	9	9	12	12	-	-	-	-
14	7	2 50	2 00	10	10	10	12	12	-	-	-	-
15	11	2 00	50	9	10	10	12	12	-	-	-	-
16	13	2 29	-	9	9	9	12	12	-	-	-	-
17	12	2 50	1 50	10	9	9 $\frac{3}{4}$	12	12	-	-	-	-
18	25	1 50	-	9	9	9	12	12	-	-	-	-
19	8	2 50	-	9	9	9	12	12	-	-	-	-
20	35	1 75	-	9	9	9	12	12	-	-	-	-
21	30	2 25	-	9	9	9	12	12	-	-	-	-
22	15	2 00	1 00	9	9	9	12	12	-	-	-	-
23	17	2 50	1 00	9	8	8 $\frac{1}{2}$	12	12	-	-	-	-
24	8	2 00	-	9	9	9	12	12	-	-	-	-
25	205	2 50	1 25	10	9	9 $\frac{1}{2}$	12	7	3	-	2	-
26	14	2 00	83	8	8	8	12	12	-	-	-	-
27	24	1 50	1 00	9	9	9	10	10	-	-	-	2
28	22	1 50	1 00	10	11	10 $\frac{1}{2}$	12	12	-	-	-	-
29	10	2 50	1 75	10	10	10	12	12	-	-	-	-
30	9	2 25	75	10	10	10	12	12	-	-	-	-

WOODEN GOODS.

No. 1	19	\$1 50	\$1 25	10	10	10	12	12	-	-	-	-
2	18	2 00	1 50	10	10	10	12	12	-	-	-	-
3	35	2 00	1 00	10	10	10	10	10	-	-	-	2
4	135	2 00	1 00	10	10	10	12	12	-	-	-	-
5	32	2 50	1 25	10	10	10	12	12	-	-	-	-
6	34	1 75	1 00	10	10	10	12	11	-	-	1	-
7	12	2 00	1 00	10	10	10	12	12	-	-	-	-
8	30	2 00	1 25	10	10	10	12	12	-	-	-	-
9	20	1 60	1 00	10	10	10	12	12	-	-	-	-
10	30	2 00	1 10	10	10	10	12	12	-	-	-	-
11	87	2 00	1 00	10	10	10	12	12	-	-	-	-
12	15	2 00	1 37	10	10	10	12	12	-	-	-	-
13	26	1 75	1 00	10	10	10	12	12	-	-	-	-
14	20	3 00	1 75	10	10	10	12	8	-	2	2	-
15	10	2 00	1 75	10	10	10	11	11	-	-	-	1
16	10	2 50	2 00	10	9	9 $\frac{1}{2}$	12	12	-	-	-	-
17	21	2 00	1 63	10	10	10	12	12	-	-	-	-
18	25	1 67	1 67	10	10	10	12	12	-	-	-	-
19	13	1 25	1 25	8	8	8	12	12	-	-	-	-
20	20	1 75	1 25	8	8	8	12	12	-	-	-	-

WOODEN GOODS — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	³ / ₄ time.	² / ₃ time.	¹ / ₂ time.	Idle.
No. 21	45	\$1 50	\$1 25	8	8	8	12	12	-	-	-	-
22	790	2 10	1 45	10	10	10	12	12	-	-	-	-
23	25	1 75	1 50	10	10	10	12	12	-	-	-	-
24	28	2 00	1 25	10	9	9 ¹ / ₃	12	8	4	-	-	-
25	10	2 50	1 50	10	10	10 ¹ / ₃	12	12	-	-	-	-
26	33	2 00	-	10	9	9 ¹ / ₃	12	7	5	-	-	-
27	60	2 00	1 00	10	10	10	12	12	-	-	-	-
28	7	3 00	2 00	10	10	10	12	12	-	-	-	-
29	5	2 50	-	10	10	10	12	12	-	-	-	-
30	19	1 75	1 50	10	10	10	12	12	-	-	-	-
31	12	2 00	1 25	12	12	12	12	12	-	-	-	-
32	10	2 25	2 00	10	10	10	12	12	-	-	-	-
33	30	2 12	1 00	10	10	10	12	12	-	-	-	-
34	25	3 00	1 00	10	8	9	12	8	-	-	4	-
35	35	2 00	1 00	10	10	10	12	12	-	-	-	-
36	70	2 75	60	10	10	10	12	12	-	-	-	-
37	36	2 00	-	10	9	9 ¹ / ₃	12	12	-	-	-	-
38	11	3 00	1 50	10	10	10	12	12	-	-	-	-
39	16	2 00	1 50	10	10	10	12	12	-	-	-	-
40	45	2 25	1 50	10	10	10	12	12	-	-	-	-
41	10	2 00	1 25	10	10	10	12	12	-	-	-	-
42	18	-	1 00	10	10	10	12	12	-	-	-	-
43	28	1 50	75	10	10	10	12	12	-	-	-	-
44	40	2 50	1 50	10	10	10	12	12	-	-	-	-
45	15	2 50	-	10	9	9 ¹ / ₃	12	12	-	-	-	-
46	10	2 00	-	9	9	9	12	12	-	-	-	-
47	11	2 00	1 50	10	10	10	12	12	-	-	-	-
48	15	3 00	75	10	10	10	12	12	-	-	-	-
49	16	2 75	1 00	8	10	9	12	10	-	-	2	-
50	15	2 75	-	10	10	10	12	8	4	-	-	-
51	25	2 00	1 00	10	10	10	12	12	-	-	-	-
52	85	1 87	1 25	10	9	9 ¹ / ₃	12	10	2	-	-	-
53	35	2 50	1 50	10	10	10	12	12	-	-	-	-
54	9	2 25	-	10	10	10	8	8	-	-	-	4
55	20	1 87	-	9	9	9	12	12	-	-	-	-
56	10	2 00	-	10	10	10	12	9	-	-	3	-
57	22	1 62	-	10	10	10	12	12	-	-	-	-
58	14	2 50	1 50	10	9	9 ¹ / ₃	12	12	-	-	-	-
59	15	2 00	1 50	10	10	10	12	12	-	-	-	-
60	20	2 25	-	10	10	10	12	12	-	-	-	-
61	10	2 00	-	10	10	10	12	12	-	-	-	-
62	15	2 50	2 00	10	10	10	12	12	-	-	-	-
63	13	2 00	1 25	10	10	10	12	12	-	-	-	-
64	15	1 50	1 25	10	10	10	12	12	-	-	-	-
65	12	1 42	-	10	10	10	12	12	-	-	-	-
66	45	2 50	75	9	8	8 ¹ / ₃	12	12	-	-	-	-
67	10	2 50	1 67	10	10	10	12	12	-	-	-	-
68	18	1 50	1 00	10	10	10	12	12	-	-	-	-
69	33	3 00	1 80	9	9	9	12	12	-	-	-	-
70	6	2 17	-	10	10	10	12	12	-	-	-	-

WOOLLEN GOODS.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 1	72	\$2 00	\$1 25	10	10	10	12	12	-	-	-	-
2	79	-	-	10	10	10	12	12	-	-	-	-
3	148	-	-	10	10	10	12	12	-	-	-	-
4	151	-	-	10	10	10	12	12	-	-	-	-
5	118	-	-	10	10	10	12	12	-	-	-	-
6	363	-	-	10	10	10	12	12	-	-	-	-
7	630	-	-	10	10	10	12	12	-	-	-	-
8	833	-	-	10	10	10	12	12	-	-	-	-
9	179	-	-	10	10	10	12	12	-	-	-	-
10	347	-	-	10	10	10	12	12	-	-	-	-
11	89	-	-	10	10	10	12	12	-	-	-	-
12	138	-	-	10	10	10	12	12	-	-	-	-
13	46	-	-	10	10	10	12	12	-	-	-	-
14	936	-	-	10	10	10	12	12	-	-	-	-
15	77	-	-	10	10	10	12	12	-	-	-	-
16	224	-	-	10	10	10	12	12	-	-	-	-
17	49	-	-	10	10	10	12	12	-	-	-	-
18	28	2 00	1 25	10	10	10	12	12	-	-	-	-
19	103	-	-	10	10	10	12	12	-	-	-	-
20	130	-	-	10	10	10	12	12	-	-	-	-
21	115	-	-	10	10	10	12	12	-	-	-	-
22	95	-	-	10	10	10	12	12	-	-	-	-
23	264	-	-	10	10	10	12	12	-	-	-	-
24	208	-	-	10	10	10	12	12	-	-	-	-
25	55	-	-	10	10	10	12	12	-	-	-	-
26	214	-	-	10	10	10	12	12	-	-	-	-
27	101	-	-	10	10	10	12	12	-	-	-	-
28	317	-	-	10	10	10	12	12	-	-	-	-
29	190	-	-	10	10	10	12	12	-	-	-	-
30	257	-	-	10	10	10	12	12	-	-	-	-
31	281	-	-	10	10	10	12	12	-	-	-	-
32	61	-	-	10	10	10	12	12	-	-	-	-
33	70	-	-	10	10	10	12	12	-	-	-	-
34	153	-	-	10	10	10	12	12	-	-	-	-
35	49	-	-	10	10	10	12	12	-	-	-	-
36	182	-	-	10	10	10	12	12	-	-	-	-
37	190	-	-	10	10	10	12	12	-	-	-	-
38	153	1 50	1 10	10	10	10	12	12	-	-	-	-
39	140	-	-	10	10	10	12	12	-	-	-	-
40	167	-	-	10	10	10	12	12	-	-	-	-
41	156	-	-	10	10	10	12	12	-	-	-	-
42	370	-	-	10	10	10	12	12	-	-	-	-
43	73	2 00	1 25	11	11	11	12	12	-	-	-	-
44	104	-	-	10	10	10	12	12	-	-	-	-
45	155	-	-	10	10	10	12	12	-	-	-	-
46	2,517	-	-	10	10	10	12	12	-	-	-	-
47	125	-	-	10	10	10	12	12	-	-	-	-
48	156	-	-	10	10	10	12	12	-	-	-	-
49	115	-	-	10	10	10	12	12	-	-	-	-
50	96	-	-	10	10	10	12	12	-	-	-	-
51	91	-	-	10	10	10	12	12	-	-	-	-
52	80	-	-	10	10	10	12	12	-	-	-	-
53	45	-	-	10	10	10	12	12	-	-	-	-
54	127	-	-	10	10	10	12	12	-	-	-	-
55	27	-	-	10	10	10	12	12	-	-	-	-
56	87	-	-	10	10	10	12	12	-	-	-	-
57	237	-	-	10	10	10	12	12	-	-	-	-
58	174	-	-	10	10	10	12	12	-	-	-	-
59	230	-	-	10	10	10	12	12	-	-	-	-
60	130	-	-	10	10	10	12	12	-	-	-	-

WOOLLEN GOODS—Continued.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May.	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 61	51	-	-	10	10	10	12	12	-	-	-	-
62	83	-	-	10	10	10	12	12	-	-	-	-
63	75	-	-	10	10	10	12	12	-	-	-	-
64	35	-	-	10	10	10	12	12	-	-	-	-
65	126	-	-	10	10	10	12	12	-	-	-	-
66	56	-	-	10	10	10	12	12	-	-	-	-
67	30	\$2 50	\$1 00	10	10	10	12	12	-	-	-	-
68	48	-	-	10	10	10	12	12	-	-	-	-
69	40	-	-	10	10	10	12	12	-	-	-	-
70	61	-	-	10	10	10	12	12	-	-	-	-
71	44	-	-	10	10	10	12	12	-	-	-	-
72	55	-	-	10	10	10	12	12	-	-	-	-
73	49	-	-	10	10	10	6	6	-	-	-	6
74	125	-	-	10	10	10	12	12	-	-	-	-
75	1,200	-	-	10	10	10	12	12	-	-	-	-
76	108	-	-	10	10	10	9	9	-	-	-	3
77	110	-	-	10	10	10	12	12	-	-	-	-
78	128	-	-	10	10	10	12	12	-	-	-	-
79	105	2 30	1 00	10	11	10 $\frac{1}{2}$	12	12	-	-	-	-
80	702	-	-	10	10	10	12	12	-	-	-	-
81	155	-	-	10	10	10	12	12	-	-	-	-
82	71	-	-	10	10	10	12	12	-	-	-	-
83	43	-	-	10	10	10	12	12	-	-	-	-
84	43	3 50	1 25	10	10	10	12	12	-	-	-	-
85	76	-	-	10	10	10	12	12	-	-	-	-
86	142	2 00	1 25	11	11	11	12	12	-	-	-	-
87	232	-	-	10	10	10	12	12	-	-	-	-
88	51	-	-	10	10	10	12	12	-	-	-	-
89	74	-	-	10	10	10	12	12	-	-	-	-
90	56	-	-	10	10	10	12	12	-	-	-	-
91	53	2 00	1 60	11	9	10	12	12	-	-	-	-
92	22	2 50	1 25	11	11	11	12	12	-	-	-	-
93	40	2 00	1 00	10	10	10	12	12	-	-	-	-
94	259	-	-	10	10	10	12	12	-	-	-	-
95	62	-	-	10	10	10	12	12	-	-	-	-
96	133	-	-	10	10	10	12	12	-	-	-	-
97	64	-	-	10	10	10	12	12	-	-	-	-
98	58	-	-	10	10	10	12	12	-	-	-	-
99	176	-	-	10	10	10	12	12	-	-	-	-
100	52	-	-	10	10	10	12	12	-	-	-	-
101	89	1 25	1 13	11	11	11	12	12	-	-	-	-
102	16	2 00	-	8	8	8	12	12	-	-	-	-
103	45	1 25	1 00	11	11	11	12	12	-	-	-	-
104	47	-	-	10	10	10	12	12	-	-	-	-
105	190	-	-	10	10	10	12	12	-	-	-	-
106	55	-	-	10	10	10	12	12	-	-	-	-
107	37	-	-	10	10	10	12	12	-	-	-	-
108	32	-	-	10	10	10	12	12	-	-	-	-
109	17	-	1 00	10	10	10	11	11	-	-	-	1
110	25	-	-	10	10	10	12	12	-	-	-	-
111	154	-	-	10	10	10	12	12	-	-	-	-
112	59	-	-	10	10	10	12	12	-	-	-	-
113	79	-	-	10	10	10	12	12	-	-	-	-
114	88	-	-	10	10	10	12	12	-	-	-	-
115	147	-	-	10	10	10	12	12	-	-	-	-
116	125	-	-	10	10	10	12	12	-	-	-	-
117	112	-	-	10	10	10	12	12	-	-	-	-
118	83	-	-	10	10	10	12	12	-	-	-	-
119	113	2 50	1 25	10	10	10	12	12	-	-	-	-
120	73	2 25	90	10	10	10	6	6	-	-	-	6

WOOLLEN GOODS — Concluded.

ESTABLISHMENTS.	Average number of employes.	AVERAGE DAY'S WAGES FOR A		HOURS OF LABOR.			Months employed in each establishment.	TIME EMPLOYED, IN MONTHS.				
		Skilled Mechanic.	Ordinary Laborer.	May to Nov.	Nov. to May	Yearly average.		Full time.	$\frac{3}{4}$ time.	$\frac{2}{3}$ time.	$\frac{1}{2}$ time.	Idle.
No. 121	112	\$2 00	\$1 25	11	11	11	12	12	-	-	-	-
122	147	2 25	1 10	10	10	10	2	2	-	-	-	10
123	56	2 75	1 35	10	10	10	12	12	-	-	-	-
124	76	-	-	10	10	10	12	12	-	-	-	-
125	109	-	-	10	10	10	12	12	-	-	-	-
126	30	1 50	1 00	10	10	10	12	12	-	-	-	-
127	63	2 00	1 00	10	10	10	6	6	-	-	-	6
128	65	-	1 00	10	10	10	12	12	-	-	-	-
129	119	2 00	1 00	10	10	10	12	12	-	-	-	-
130	133	-	-	10	10	10	12	12	-	-	-	-
131	35	-	-	10	10	10	12	12	-	-	-	-
132	30	-	-	10	10	10	12	12	-	-	-	-
133	25	-	-	10	10	10	12	12	-	-	-	-
134	134	-	-	10	10	10	12	12	-	-	-	-
135	80	-	-	10	10	10	12	12	-	-	-	-
136	263	-	-	10	10	10	12	12	-	-	-	-
137	56	-	-	10	10	10	12	12	-	-	-	-
138	90	2 25	1 37	11	11	11	12	12	-	-	-	-
139	64	-	-	10	10	10	12	12	-	-	-	-
140	44	-	-	10	10	10	12	12	-	-	-	-
141	498	-	-	10	10	10	12	12	-	-	-	-
142	100	2 75	1 25	11	11	11	12	12	-	-	-	-
143	68	3 00	1 25	11	11	11	12	12	-	-	-	-
144	35	-	-	10	10	10	12	12	-	-	-	-
145	40	-	-	10	10	10	12	12	-	-	-	-
146	48	-	1 35	10	10	10	12	12	-	-	-	-
147	43	2 50	1 25	11	11	11	12	12	-	-	-	-
148	31	-	-	11	11	11	12	12	-	-	-	-
149	204	-	-	10	10	10	12	12	-	-	-	-
150	20	-	-	10	10	10	12	12	-	-	-	-

WORSTED GOODS.

No. 1	69	-	-	10	10	10	12	12	-	-	-	-
2	296	-	-	10	10	10	12	12	-	-	-	-
3	100	-	-	10	10	10	12	12	-	-	-	-
4	94	-	-	10	10	10	12	12	-	-	-	-
5	54	-	-	10	10	10	12	12	-	-	-	-
6	95	-	-	10	10	10	12	12	-	-	-	-
7	210	-	-	10	10	10	12	12	-	-	-	-
8	63	-	-	10	10	10	12	12	-	-	-	-
9	169	-	-	10	10	10	12	12	-	-	-	-
10	43	-	-	10	10	10	12	12	-	-	-	-
11	930	-	-	10	10	10	12	12	-	-	-	-
12	23	-	-	10	10	10	12	12	-	-	-	-
13	32	-	-	10	10	10	12	12	-	-	-	-
14	95	-	-	10	10	10	12	12	-	-	-	-
15	209	-	-	10	10	10	12	12	-	-	-	-

The relation borne by the 2,440 establishments considered to the whole number of establishments in the twenty-

one industries, and to the whole number of establishments in all the industries in the State, and the relation of the 207,793 employés to the whole number in the twenty-one industries and in all the State industries, were shown in the introduction to this part.

From the statistics giving the average day's wages for skilled mechanics and ordinary laborers, the hours of labor, and time employed, we have prepared several tables which present, in a condensed form, the full meaning of the figures.

The first showing is devoted to the average day's wage of skilled mechanics and the second to that of ordinary laborers in the twenty-one industries under consideration, comprehending 207,793 employés at work, in 1880, in 2,440 establishments. No consolidation has been made of day's wages. Each and every sum reported as being paid for a day's labor is given exactly as returned in the manufacturers' schedules.

The numbers in the twenty-one columns, opposite each figure, denoting an average day's wage, indicate the number of establishments in the specified industry in which the figure given was the average day's wage for a skilled mechanic or an ordinary laborer.

SKILLED MECHANICS.

AVERAGE DAY'S WAGE.	Boots and Shoes.	Boxes.	Brick.	Building.	Carriages and Wagons.	Clothing.	Cotton Goods.	Food Pre- parations.	Furniture.	Leather.	Machines and Machinery.
\$0 80, . .	-	-	-	-	-	1	-	-	-	-	-
85, . .	-	-	-	-	-	1	-	-	-	-	-
1 00, . .	5	-	-	-	-	7	-	-	-	-	-
1 10, . .	-	-	-	-	-	-	-	-	-	-	-
1 20, . .	1	-	-	-	-	-	-	-	-	-	-
1 25, . .	6	-	1	-	-	4	-	-	-	-	-
1 30, . .	-	-	-	-	-	1	-	-	-	-	-
1 33, . .	1	-	-	-	-	1	-	-	-	2	-
1 35, . .	-	-	-	-	-	-	-	-	-	-	-
1 40, . .	1	-	1	-	-	-	-	-	-	-	-
1 42, . .	-	-	-	-	-	1	-	-	-	-	-
1 45, . .	-	-	-	-	-	-	-	-	-	-	-
1 50, . .	28	4	3	1	1	12	1	1	3	15	1
1 51, . .	-	-	-	-	-	-	-	-	-	-	-
1 55, . .	-	-	-	-	-	-	-	-	-	-	-
1 60, . .	-	-	1	1	-	1	-	-	1	1	1
1 62, . .	-	-	-	-	-	1	-	-	1	-	-
1 64, . .	-	-	-	-	-	-	-	-	-	1	-
1 65, . .	-	-	-	1	-	-	-	-	-	1	-
1 66, . .	2	-	-	-	-	-	-	1	-	2	-
1 67, . .	1	2	-	-	-	-	-	-	1	3	-
1 70, . .	1	-	-	-	-	1	-	-	-	-	1
1 75, . .	26	4	1	11	-	2	-	2	3	15	6
1 80, . .	1	-	-	-	-	-	-	-	1	-	1
1 83, . .	-	-	-	1	-	-	-	1	1	-	-
1 85, . .	1	-	-	-	-	-	-	-	-	-	-
1 87, . .	-	-	1	1	-	-	-	-	-	-	-
1 90, . .	2	-	-	1	-	-	-	-	-	-	2
1 95, . .	-	-	-	-	-	-	-	-	-	-	-
1 97, . .	-	-	-	-	-	-	-	-	-	-	-
2 00, . .	135	9	6	77	17	26	1	22	47	59	29
2 05, . .	-	-	-	-	-	-	-	-	-	-	1
2 08, . .	-	-	-	-	-	-	-	-	-	-	-
2 10, . .	-	-	-	-	-	-	-	-	-	-	1
2 12, . .	-	-	-	5	-	-	-	-	1	-	-

SKILLED MECHANICS.

AVERAGE DAY'S WAGE.	Metals and Metallic Goods.	Musical In- struments.	Paper.	Printing and Publishing.	Rubber and Elastic Goods.	Stone.	Tobacco.	Wooden Goods.	Woollen Goods.	Worsted Goods.	Totals.
\$0 80, . .	-	-	-	-	-	-	-	-	-	-	1
85, . .	-	-	-	-	-	-	-	-	-	-	1
1 00, . .	1	-	1	-	-	-	-	-	-	-	14
1 10, . .	-	-	1	-	-	-	-	-	-	-	1
1 20, . .	-	-	-	-	-	-	-	-	-	-	1
1 25, . .	1	-	4	-	-	-	-	1	2	-	19
1 30, . .	-	-	-	-	-	-	-	-	-	-	1
1 33, . .	-	-	1	-	-	-	-	-	-	-	5
1 35, . .	-	-	1	-	-	-	-	-	-	-	1
1 40, . .	-	-	-	-	-	-	-	-	-	-	2
1 42, . .	-	-	-	-	-	-	-	1	-	-	2
1 45, . .	-	-	1	-	-	-	-	-	-	-	1
1 50, . .	2	2	7	3	1	-	5	5	2	-	95
1 51, . .	-	-	1	-	-	-	-	-	-	-	1
1 55, . .	-	-	-	-	1	-	-	-	-	-	1
1 60, . .	1	-	-	-	1	1	-	1	-	-	10
1 62, . .	-	-	-	-	-	-	-	1	-	-	3
1 64, . .	-	-	-	-	-	-	-	-	-	-	1
1 65, . .	-	-	1	-	-	-	-	-	-	-	3
1 66, . .	-	-	-	-	-	-	1	-	-	-	6
1 67, . .	1	-	-	-	-	-	-	1	-	-	9
1 70, . .	-	-	-	-	-	-	-	-	-	-	3
1 75, . .	7	-	8	2	1	3	1	5	-	-	97
1 80, . .	2	-	-	-	1	-	-	-	-	-	6
1 83, . .	-	-	-	-	-	-	-	-	-	-	3
1 85, . .	-	-	-	-	-	-	-	-	-	-	1
1 87, . .	1	-	1	-	-	-	-	2	-	-	6
1 90, . .	1	-	1	-	-	-	-	-	-	-	7
1 95, . .	1	-	-	-	-	-	-	-	-	-	1
1 97, . .	1	-	-	-	-	-	-	-	-	-	1
2 00, . .	41	4	18	19	9	5	8	25	10	-	567
2 05, . .	-	-	-	-	-	-	-	-	-	-	1
2 08, . .	-	-	1	-	-	-	-	-	-	-	1
2 10, . .	-	-	-	-	-	-	-	1	-	-	2
2 12, . .	1	-	-	-	-	-	-	1	-	-	8

SKILLED MECHANICS — Continued.

AVERAGE DAY'S WAGE.	Boots and Shoes.	Boxes.	Brick.	Building.	Carriages and Wagons.	Clothing.	Cotton Goods.	Food Prep- arations.	Furniture.	Leather.	Machines and Machinery.
\$2 15, . .	-	-	-	1	-	-	-	-	-	-	1
2 16, . .	1	-	-	-	-	-	-	-	-	1	-
2 17, . .	-	-	-	-	-	-	-	-	-	-	-
2 18, . .	-	-	-	-	-	-	-	-	-	-	-
2 20, . .	-	-	-	-	-	-	-	-	-	-	-
2 25, . .	56	3	2	43	13	4	2	9	11	8	23
2 30, . .	1	-	-	-	-	-	-	-	-	-	4
2 33, . .	-	-	-	-	-	-	-	-	-	-	-
2 35, . .	-	-	-	1	-	-	-	-	-	-	1
2 37, . .	-	-	-	1	-	1	-	-	-	-	2
2 38, . .	-	-	-	-	1	-	-	-	-	-	-
2 40, . .	-	-	-	-	-	-	-	-	-	-	2
2 42, . .	-	-	-	-	-	-	-	-	-	-	-
2 45, . .	-	-	-	-	-	-	-	-	-	-	1
2 46, . .	-	-	-	-	-	-	-	-	-	-	1
2 48, . .	-	-	-	-	-	-	-	-	-	-	1
2 50, . .	136	7	2	63	45	52	1	19	25	38	43
2 55, . .	-	-	-	-	-	1	-	-	-	-	-
2 57, . .	-	-	-	-	2	-	-	-	-	-	-
2 60, . .	-	-	-	-	-	-	-	-	-	-	-
2 61, . .	-	-	-	-	-	1	-	-	-	-	-
2 62, . .	-	-	-	-	-	-	-	-	1	1	-
2 65, . .	-	-	-	-	-	-	-	-	-	-	-
2 67, . .	-	-	-	1	-	-	-	-	-	1	-
2 70, . .	-	-	-	-	1	-	-	-	-	-	1
2 75, . .	15	-	-	4	4	-	1	2	-	2	7
2 80, . .	-	-	-	-	-	-	-	-	-	-	-
2 83, . .	-	-	-	-	-	-	-	-	-	-	-
2 84, . .	-	-	-	-	-	-	-	-	-	-	-
2 85, . .	-	-	-	-	-	-	-	-	-	-	-
3 00, . .	37	1	1	20	5	23	-	8	4	7	12
3 02, . .	-	-	-	-	-	-	-	-	-	-	-
3 25, . .	-	-	-	1	-	-	-	-	-	-	-
3 33, . .	-	-	-	-	-	-	-	-	-	-	-
3 50, . .	-	-	1	6	-	5	-	2	-	1	1
3 56, . .	-	-	-	-	-	-	-	1	-	-	-

SKILLED MECHANICS — Concluded.

AVERAGE DAY'S WAGE.	Boots and Shoes.	Boxes.	Brick.	Building.	Carriages and Wagons.	Clothing.	Cotton Goods.	Food Pre- parations.	Furniture.	Leather.	Machines and Machinery.
\$3 58, . .	-	-	-	-	-	1	-	-	-	-	-
3 75, . .	-	-	-	-	-	-	-	-	-	-	-
4 00, . .	-	-	-	-	-	2	-	-	-	-	1
4 50, . .	-	-	-	-	-	-	-	-	-	-	-
5 00, . .	-	-	-	-	-	1	-	-	-	1	1
6 00, . .	-	-	-	-	-	-	-	-	-	-	-
Not given, .	5	-	-	-	1	10	144	2	-	1	-
Totals, . .	460	30	20	240	90	160	150	70	100	160	150

ORDINARY LABORERS.

\$0 35, . .	-	1	-	-	-	-	-	-	-	-	-
50, . .	7	-	-	1	-	9	-	1	1	-	1
60, . .	-	-	-	-	-	-	-	-	-	-	-
65, . .	-	-	-	-	-	1	-	-	-	-	-
67, . .	-	-	-	-	-	-	-	-	-	-	-
70, . .	-	-	-	-	-	1	1	-	-	-	-
75, . .	23	2	-	1	1	8	-	1	-	-	-
77, . .	-	-	-	-	-	1	-	-	-	-	-
80, . .	3	1	-	-	-	1	-	-	-	-	-
83, . .	1	-	-	-	1	2	-	-	-	1	-
84, . .	-	-	1	-	-	-	-	-	-	-	-
87, . .	2	-	-	-	-	-	-	-	-	-	-
90, . .	1	2	-	-	-	1	-	-	-	-	1
1 00, . .	146	9	6	21	16	49	4	16	15	22	16
1 08, . .	-	-	-	-	-	-	-	-	-	-	-
1 09, . .	-	-	-	-	1	-	-	-	-	-	-
1 10, . .	2	-	-	-	-	-	-	-	-	1	4
1 12, . .	2	-	-	-	-	-	-	-	-	-	-
1 13, . .	-	-	-	-	-	-	-	-	-	1	1
1 15, . .	1	-	-	-	-	-	-	-	-	-	1
1 16, . .	-	-	-	-	-	1	-	-	-	1	-
1 17, . .	-	-	-	-	-	3	-	1	-	3	-

SKILLED MECHANICS — Concluded.

AVERAGE DAY'S WAGE.	Metals and Metallic Goods.	Musical In- struments.	Paper.	Printing and Publishing.	Rubber and Elastic Goods.	Stone.	Tobacco.	Wooden Goods.	Woollen Goods.	Worsted Goods.	Totals.
£3 58, . .	-	-	-	-	-	-	-	-	-	-	1
3 75, . .	1	-	-	-	-	-	-	-	-	-	1
4 00, . .	6	1	1	3	-	1	-	-	-	-	15
4 50, . .	1	-	-	-	-	-	-	-	-	-	1
5 00, . .	1	-	-	-	-	-	-	-	-	-	4
6 00, . .	3	-	-	-	-	-	-	-	-	-	3
Not given, .	1	-	8	-	5	-	-	1	124	15	317
Totals, . .	270	40	70	100	25	40	30	70	150	15	2,440

ORDINARY LABORERS.

[illegible]

ORDINARY LABORERS — Concluded.

AVERAGE DAY'S WAGE.	Boots and Shoes.	Boxes.	Brick.	Building.	Carriages and Wagons.	Clothing.	Cotton Goods.	Food Pre- parations.	Furniture.	Leather.	Machines and Machinery.
\$1 20, . .	-	-	1	-	-	-	-	-	-	1	1
1 21, . .	-	-	-	-	-	-	-	-	-	-	-
1 23, . .	-	-	-	-	-	-	-	-	-	1	-
1 25, . .	84	6	5	30	16	34	-	9	14	37	32
1 28, . .	-	-	-	-	-	-	-	-	-	-	-
1 30, . .	-	-	-	1	1	-	-	-	-	-	2
1 33, . .	1	1	-	-	-	1	-	1	1	15	-
1 35, . .	-	-	-	-	-	1	-	-	-	-	4
1 37, . .	3	-	1	2	1	1	-	-	2	-	-
1 38, . .	-	-	-	-	-	-	-	-	-	-	-
1 39, . .	-	-	-	-	-	-	-	-	-	-	-
1 40, . .	3	-	-	1	-	1	1	-	-	-	3
1 42, . .	-	-	-	-	-	-	-	-	-	-	-
1 44, . .	-	-	-	-	-	-	-	-	-	-	-
1 45, . .	-	-	-	-	-	-	-	-	-	-	-
1 50, . .	134	5	3	76	28	22	-	14	27	50	37
1 53, . .	-	-	-	-	-	-	-	-	-	-	1
1 55, . .	-	-	-	1	-	-	-	-	-	-	-
1 60, . .	1	-	-	1	-	-	-	-	-	1	-
1 62, . .	1	-	-	3	-	-	-	1	-	1	-
1 63, . .	-	-	-	1	-	-	-	1	-	-	-
1 65, . .	-	-	1	-	-	-	-	-	-	-	1
1 66, . .	-	-	-	-	-	-	-	-	-	1	-
1 67, . .	3	-	-	1	-	-	-	-	2	2	2
1 75, . .	23	2	-	35	5	3	-	8	3	5	8
1 80, . .	-	-	-	-	-	-	-	-	-	-	-
1 83, . .	-	-	-	-	-	1	-	-	-	-	1
2 00, . .	15	-	-	18	8	6	-	6	6	2	11
2 16, . .	-	-	-	-	1	-	-	-	-	-	-
2 25, . .	-	-	-	3	1	-	-	-	2	-	2
2 50, . .	-	-	-	1	-	-	-	-	-	-	1
3 00, . .	-	-	-	-	-	-	-	-	-	-	-
Not given, . .	4	1	2	43	10	13	144	11	27	15	20
Totals, . .	460	30	20	240	90	160	150	70	100	160	150

ORDINARY LABORERS — Concluded.

AVERAGE DAY'S WAGE.	Metals and Metallic Goods.	Musical In- struments.	Paper.	Printing and Publishing.	Rubber and Elastic Goods.	Stone.	Tobacco.	Wooden Goods.	Woollen Goods.	Worsted Goods.	Totals.
1 20, . .	2	-	-	-	1	-	-	-	-	-	6
1 21, . .	-	-	1	-	-	-	-	-	-	-	1
1 23, . .	-	-	-	-	-	-	-	-	-	-	1
1 25, . .	43	5	30	10	7	4	2	12	11	-	391
1 28, . .	1	-	-	-	-	-	-	-	-	-	1
1 30, . .	1	-	1	-	1	-	1	-	-	-	8
1 33, . .	4	-	1	1	-	1	-	-	-	-	27
1 35, . .	1	-	2	-	-	-	-	-	2	-	10
1 37, . .	2	1	1	-	-	-	1	1	1	-	17
1 38, . .	1	-	-	-	-	-	-	-	-	-	1
1 39, . .	1	-	-	-	-	-	-	-	-	-	1
1 40, . .	4	-	-	-	-	-	-	-	-	-	13
1 42, . .	1	-	1	-	-	-	-	-	-	-	2
1 44, . .	-	1	-	-	-	-	-	-	-	-	1
1 45, . .	1	-	-	-	1	-	-	1	-	-	3
1 50, . .	71	11	9	25	-	14	4	12	-	-	542
1 53, . .	-	-	-	-	-	-	-	-	-	-	1
1 55, . .	-	-	-	-	-	-	-	-	-	-	1
1 60, . .	1	-	-	-	-	-	-	-	1	-	5
1 62, . .	1	-	-	-	-	-	-	-	-	-	7
1 63, . .	-	-	-	-	-	-	-	1	-	-	3
1 65, . .	-	-	-	-	-	-	-	-	-	-	2
1 66, . .	1	-	-	1	-	1	-	-	-	-	4
1 67, . .	2	-	1	-	-	-	-	2	-	-	15
1 75, . .	12	4	-	4	1	2	1	2	-	-	118
1 80, . .	-	1	-	-	-	-	-	1	-	-	2
1 83, . .	-	-	-	-	-	-	-	-	-	-	2
2 00, . .	18	4	-	7	-	7	3	4	-	-	115
2 16, . .	-	-	-	-	-	-	-	-	-	-	1
2 25, . .	1	-	-	-	-	-	-	-	-	-	9
2 50, . .	2	2	-	2	-	1	-	-	-	-	9
3 00, . .	-	-	-	1	-	-	-	-	-	-	1
Not given, .	23	8	-	10	5	4	6	14	122	15	497
Totals, . .	270	40	70	100	25	40	30	70	150	15	2,440

The results of these showings may be still further consolidated, advantageously.

AVERAGE DAY'S WAGE.	Skilled Mechanic. Basis— Establishments.	Ordinary Laborer. Basis— Establishments.
Under \$1,	2	104
\$1 to \$1.50,	47	1,002
\$1.50,	95	542
Above \$1.50, but under \$1 75,	37	38
\$1.75,	97	118
Above \$1.75, but under \$2,	25	4
\$2,	567	115
Above \$2, but under \$2.25,	23	1
\$2.25,	245	9
Above \$2.25, but under \$2.50,	25	-
\$2.50,	605	9
Above \$2.50, but under \$3,	82	-
\$3,	206	1
Above \$3,	67	-
Not given,	317	497
Totals,	2,440	2,440

By industries, the consolidated results are as follows : —

INDUSTRIES.	NUMBER OF ESTABLISHMENTS PAYING SKILLED MECHANICS AS AN AVERAGE DAY'S WAGE			NUMBER OF ESTABLISHMENTS PAYING ORDINARY LABORERS AS AN AVERAGE DAY'S WAGE		
	Less than \$2.50.	\$2.50 and over.	Total.	Less than \$1.50.	\$1.50 and over.	Total.
Boots and shoes,	267	188	455	279	177	456
Boxes,	22	8	30	22	7	29
Brick,	16	4	20	14	4	18
Building,	145	95	240	57	*140	197
Carriages and wagons,	32	*57	89	37	*43	80
Clothing,	64	*86	150	115	32	147
Cotton goods,	4	2	6	6	-	6
Food preparations,	36	32	68	29	*30	59
Furniture,	70	30	100	33	*40	73
Leather,	108	51	159	83	62	145
Machines and machinery,	84	66	150	66	64	130
Metals and metallic goods,	108	*161	269	138	109	247
Musical instruments,	10	*30	40	10	*22	32
Paper,	51	11	62	60	10	70
Printing and publishing,	30	*70	100	50	40	90
Rubber and elastic goods,	15	5	20	19	1	20
Stone,	15	*25	40	11	*25	36
Tobacco,	19	11	30	16	8	24
Wooden goods,	49	20	69	34	22	56
Woollen goods,	18	8	26	27	1	28
Worsted goods,	-	-	-	-	-	-
Totals,	1,163	960	2,123	1,106	837	1,943

We drop from the industry presentation the 317 establishments not giving wages for skilled mechanics, and the 497 not giving wages for ordinary laborers.

The asterisk indicates that, in the majority of the establishments, in the industries so designated, the skilled mechanic received an average day's wage of \$2.50 or over, and the ordinary laborer, \$1.50 or over. In the manufacture of carriages and wagons, clothing, metals and metallic goods, musical instruments, printing and publishing, and stone, the majority of the establishments so engaged pay an average day's wage of \$2.50 or over to skilled mechanics; in building, carriages and wagons, food preparations, furniture, musical instruments, and stone, the majority of the establishments pay an average day's wage of \$1.50 or over to ordinary laborers.

We present on pages 238 and 239 a table showing, with a specification of industries, the number of establishments running 8, 9, 10, etc., hours per day, the figures given being averages for the year.

The daily average for the year for the 2,440 establishments was 9.92 hours. Of the 480 varying from ten hours, 413 worked less than ten, and 67 more than ten hours.

The lower table on pages 238 and 239 deals with the question of the working time of the 207,793 employés in the 2,440 manufactories. We see that if each establishment ran 12 months, the possible working time of the 2,440 would be 29,280 months. The 2,440 establishments under consideration did actually run 26,882 months on full time, or 91.80 per cent of full time. For 1,358 months they ran less than full time, being 4.64 per cent of full time, while during 1,040 months, or 3.56 per cent, they were idle. The averages for each establishment were 11.57 months in operation, of which 11.01 months were on full time and .56 of a month on less than full time, while during .43 of a month the establishments were idle. In other words, the 2,440 establishments ran, on an average, more than $11\frac{1}{2}$ months during the census year. The averages for each of the twenty-one industries can be easily drawn from the table.

	INDUSTRIES.	AVERAGE DAILY HOURS OF LABOR— FOR THE YEAR.				
		8 Hours.	8½ Hours.	8½ Hours.	8¾ Hours.	9 Hours.
1	Boots and shoes,	5	—	2	—	21
2	Boxes,	2	—	—	—	1
3	Brick,	—	—	—	—	2
4	Building,	1	—	—	—	52
5	Carriages and wagons,	—	—	1	—	4
6	Clothing,	3	—	2	—	28
7	Cotton goods,	—	—	—	—	—
8	Food preparations,	—	—	—	—	1
9	Furniture,	—	—	1	—	8
10	Leather,	—	—	—	—	5
11	Machines and machinery,	—	—	—	—	1
12	Metals and metallic goods,	5	1	1	1	13
13	Musical instruments,	—	—	2	—	1
14	Paper,	—	—	—	—	3
15	Printing and publishing,	3	—	1	—	17
16	Rubber and elastic goods,	1	—	1	—	1
17	Stone,	—	—	—	—	13
18	Tobacco,	2	—	1	—	10
19	Wooden goods,	3	—	1	—	5
20	Woollen goods,	1	—	—	—	—
21	Worsted goods,	—	—	—	—	—
Totals,		26	1	13	1	186

	INDUSTRIES.	Average number of employés.	Number of establishm'ts.	Possible working time — in months.
1	Boots and shoes,	37,657	460	5,520
2	Boxes,	775	30	360
3	Brick,	1,135	20	240
4	Building,	5,645	240	2,880
5	Carriages and wagons,	1,962	90	1,080
6	Clothing,	11,435	160	1,920
7	Cotton goods,	59,684	150	1,800
8	Food preparations,	2,901	70	840
9	Furniture,	3,133	100	1,200
10	Leather,	6,703	160	1,920
11	Machines and machinery,	11,580	150	1,800
12	Metals and metallic goods,	18,249	270	3,240
13	Musical instruments,	2,821	40	480
14	Paper,	6,354	70	840
15	Printing and publishing,	5,227	100	1,200
16	Rubber and elastic goods,	2,644	25	300
17	Stone,	1,370	40	480
18	Tobacco,	905	30	360
19	Wooden goods,	2,534	70	840
20	Woollen goods,	22,597	150	1,800
21	Worsted goods,	2,482	15	180
Totals,		207,793	2,440	29,280
Percentages,		—	—	100.00
Averages,		—	—	12 mos.

AVERAGE DAILY HOURS OF LABOR—FOR THE YEAR.

9 1-6 Hours.	9½ Hours.	9 5-6 Hours.	10 Hours.	10¼ Hours.	10½ Hours.	11 Hours.	11½ Hours.	12 Hours.	Totals.	
-	13	-	418	-	1	-	-	-	460	1
-	2	-	25	-	-	-	-	-	30	2
-	2	-	9	-	1	3	-	3	20	3
-	70	-	117	-	-	-	-	-	240	4
-	11	-	73	-	-	1	-	-	90	5
-	9	-	116	-	-	-	-	2	160	6
-	-	-	150	-	-	-	-	-	150	7
-	6	-	44	-	5	3	-	11	70	8
-	14	-	77	-	-	-	-	-	100	9
-	3	-	149	-	-	1	-	2	160	10
-	3	-	144	-	-	2	-	-	150	11
2	15	2	223	-	4	3	-	-	270	12
-	3	-	34	-	-	-	-	-	40	13
-	2	-	56	1	-	2	1	5	70	14
-	4	-	75	-	-	-	-	-	100	15
-	-	-	21	-	1	-	-	-	25	16
-	15	-	12	-	-	-	-	-	40	17
-	3	-	12	-	1	1	-	-	30	18
-	7	-	53	-	-	-	-	1	70	19
-	-	-	137	-	1	11	-	-	150	20
-	-	-	15	-	-	-	-	-	15	21
2	182	2	1,960	1	14	27	1	24	2,440	

Full time— in months.	¾ time— in months.	⅔ time— in months.	½ time— in months.	Entire work- ing time—in months.	Time idle—in months.	
4,516	236	14	353	5,119	401	1
350	4	3	-	357	3	2
139	18	-	5	162	78	3
2,517	91	33	57	2,698	182	4
1,008	29	4	23	1,064	16	5
1,788	23	20	40	1,871	49	6
1,793	-	-	-	1,793	7	7
789	5	12	14	820	20	8
1,126	36	-	15	1,171	29	9
1,866	12	-	16	1,894	26	10
1,766	12	1	-	1,779	21	11
2,994	100	36	21	3,151	89	12
463	2	5	5	475	5	13
788	18	-	13	819	21	14
1,164	8	1	7	1,180	20	15
292	-	-	1	293	7	16
428	23	6	2	459	21	17
349	3	-	2	354	6	18
804	15	2	12	833	7	19
1,768	-	-	-	1,768	32	20
180	-	-	-	180	-	21
26,882	635	137	586	28,240	1,040	
91.80	2.17	.47	2.00	96.44	3.56	
11.01 mos.	.26 mos.	.06 mos.	.24 mos.	11 57 mos.	.43 mos.	

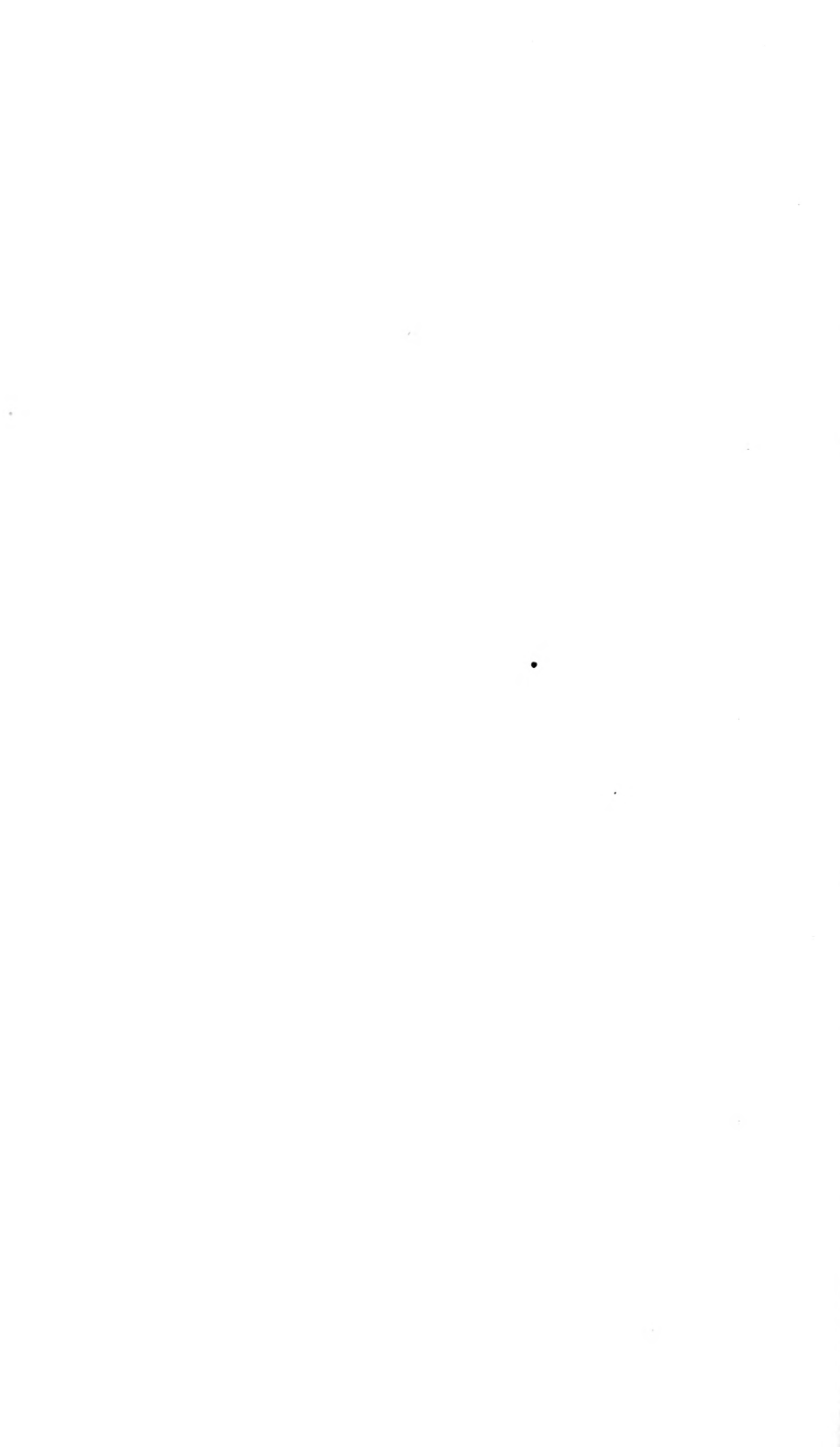
The final presentation presents averages of working time and daily and yearly actual earnings on a new basis, for which we have never before been able to secure the necessary original returns. We continue to deal with the 207,793 employés, and show the wages paid in each industry to an average number of employés. From this wage figure we arrive at \$358.19 as the actual average yearly earnings, — the 207,793 employés including men, women, youth, and children. The average for the men alone would, of course, be greater, and of the women, youth, and children less. To arrive at the actual time employed, the proportions of three-quarters, two-thirds, and half-time were reduced to their equivalent in *full time*. In other words, the 11.57 months in *operation*, when reduced to *full time*, became 11.36 months, or 290.62 days. We deducted the fifty-two Sundays and six holidays from 365, and adopted 307 days for the working year. Dividing the average individual wage, \$358.19, by 290.62, we secure \$1.23 as the actual average day's earnings for each of the 207,793 employés, this number comprehending, as before explained, men, women, youth, and children. The daily average, like the yearly, would be more for men alone, and less for women, youth, and children. The industry averages are shown specifically in the table. In the manufacture of musical instruments the highest daily and yearly average earnings are obtained by employés; the lowest daily average is in the manufacture of cotton goods, while brick-making, being carried on only 198.27 days, furnishes the lowest yearly average earnings.

Next to the manufacture of musical instruments, those employés engaged in printing and publishing earned the most in a year. Two industries, — musical instruments and printing and publishing, enable their employés to earn more than \$500 yearly; eight, — building, carriages and wagons, food preparations, furniture, leather, machines and machinery, metals and metallic goods, and stone, between \$400 and \$500; eight, — boots and shoes, boxes, clothing, paper, rubber and elastic goods, tobacco, wooden goods, and woollen goods, between \$300 and \$400; while three, — cotton and worsted goods and brick, fall below \$300 for a yearly average.

INDUSTRIES.	Average number of em- ployés.	WAGES. Total paid during the year.	Actual average working time in months and days for each establishment; short time being reduced to its equiv- alent in full time.		Actual average day's earnings, —includ- ing men, women, youth and children.	Actual average yearly earnings, —includ- ing men, women, youth and children.
			Months.	Days.		
Boots and shoes, . . .	37,657	\$14,369,284	10.60	271.18	\$1 41	\$381 58
Boxes,	775	272,785	11.16	285.51	1 23	351 98
Brick,	1,135	214,835	7.75	198.27	95	189 28
Building,	5,645	2,684,097	10.98	280.90	1 69	475 48
Carriages and wagons, .	1,962	976,104	11.59	296.51	1 68	497 50
Clothing,	11,435	4,021,363	11.49	293.95	1 20	351 67
Cotton goods,	59,684	15,451,347	11.95	305.72	85	258 89
Food preparations, . . .	2,901	1,349,793	11.53	294.98	1 58	465 29
Furniture,	3,133	1,445,394	11.54	295 23	1 56	461 35
Leather,	6,703	3,028,610	11.76	300.86	1 50	451 83
Machines and machinery,	11,580	5,655,523	11.83	302.65	1 61	488 39
Metals and metallic goods,	18,249	7,768,187	11.49	293.95	1 45	425 68
Musical instruments, . .	2,821	1,661,768	11.75	300.60	1 96	589 07
Paper,	6,354	2,189,883	11.54	295 23	1 17	344 65
Printing and publishing, .	5,227	2,775,936	11.74	300.35	1 77	531 08
Rubber and elastic goods,	2,644	824,372	11.70	299.32	1 04	311 79
Stone,	1,370	580,009	11.25	287.81	1 47	423 36
Tobacco,	905	360,224	11.74	300.34	1 33	398 04
Wooden goods,	2,534	1,007,165	11.75	300.60	1 39	393 51
Woollen goods,	22,597	7,077,444	11.78	301.37	1 04	313 20
Worsted goods,	2,482	716,728	12.00	307.00	94	288 77
Totals,	207,793	\$74,430,851	11.36	290.62	\$1 23	\$358 19

PART III.

PROFITS AND EARNINGS.



PART III.

PROFITS AND EARNINGS.

We present the material in this Part as the statistical supplement of Part II. The latter deals with time employed and day's wages; this considers yearly earnings and the profits of manufacturers.

The same establishments are considered in this Part as in the one preceding. The relations of the 2,440 establishments and 207,793 employés, in the twenty-one industries, to the whole number of establishments and employés in those industries, and also to the whole number of establishments and employés in all the manufacturing and mechanical industries of the State, have been plainly shown on page 183.

As a further proof of the comprehensive and representative nature of these statistics, we call attention to the table on the next page, in which the capital invested, wages paid during the year, stock used, and value of product of the 2,440 establishments are brought into comparison with similar statistics for the 14,352 establishments in the State.

We see that the 2,440 establishments have 53+ per cent of the entire invested capital, pay 58+ per cent of the wages, use 57+ per cent of the stock, and produce 57+ per cent of the entire value of manufactures in the State. In other words, these 2,440 establishments represent 7 per cent more invested capital, 17 per cent more paid as wages, and 15 per cent more stock used and value of goods made than the remaining 11,912 establishments.

INDUSTRIES.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.
Boots and shoes, . . .	\$11,590,400	\$14,639,284	\$37,523,551	\$59,414,793
Boxes,	289,900	272,785	522,565	978,527
Bricks,	1,086,000	214,835	291,059	631,226
Building,	2,021,412	2,684,097	4,933,281	9,221,381
Carriages and wagons, . . .	1,583,500	976,104	1,756,880	3,278,255
Clothing,	5,674,917	4,021,363	11,788,679	19,357,796
Cotton goods,	51,278,782	15,451,347	35,009,108	66,471,313
Food preparations,	5,414,680	1,349,793	39,628,485	43,007,921
Furniture,	1,744,200	1,445,394	2,435,244	4,791,147
Leather,	7,261,949	3,028,610	17,013,822	23,343,837
Machines and machinery, . .	11,519,949	5,655,523	7,931,580	16,846,889
Metals and metallic goods, . .	16,503,763	7,768,187	16,898,469	30,757,447
Musical instruments,	3,003,866	1,661,768	1,953,675	4,542,121
Paper,	8,513,820	2,189,883	8,402,309	13,025,717
Printing and publishing, . .	3,443,128	2,775,936	2,429,093	7,239,512
Rubber and elastic goods, . .	1,997,000	824,372	3,073,462	4,778,498
Stone,	1,009,580	580,009	727,315	1,799,771
Tobacco,	623,025	360,224	753,877	1,330,081
Wooden goods,	2,374,767	1,007,165	1,905,298	3,473,192
Woollen goods,	23,131,765	7,077,441	25,579,622	41,912,420
Worsted goods,	1,870,162	716,728	3,442,437	4,979,595
Totals (2,440 establishments),	\$161,936,565	\$74,700,851	\$224,005,811	\$361,181,439
Totals (the State: 14,352 establishments),	303,806,185	128,315,362	386,972,655	631,135,284
Percentages,	53+	58+	57+	57+

The succeeding tables are arranged alphabetically by their industry heads as in Part II. Each showing covers the following points:—

Establishment number; average number of employ  s; capital invested; wages paid during the year; stock used; value of product; gross profit; percentage of gross profit of value of product; estimated interest and expenses; net profit or loss; percentage of stock used of value of product; percentage of wages paid of value of product; percentage of interest and expenses of value of product; percentage of net profit or loss of value of product; average yearly product per employ  ; average yearly net profit per employ  ; and the average yearly earnings of each employ  .

The tables are so explicit that but one feature seems to require explanation. This is the column headed "Estimated interest and expenses." In computing the interest we have allowed six per cent on the capital invested; for the expenses of conducting business, including rents, salaries,

insurance, freights and every kind of running expense outlays, ten per cent on the value of product. The result of this application of estimated interest and expenses is seen in the table subjoined:—

INDUSTRIES.	ESTABLISHMENTS.				
	Whole number.	Number losing money or not clearing a gross profit during the year.	Number clearing a gross profit during the year.	Number clearing a net profit over and above 6 per cent on capital as interest, and 10 per cent on value of product as expenses.	Number not clearing a net profit over and above 6 per cent on capital and 10 per cent on value of product for interest and expenses.
Boots and shoes, . . .	460	3	457	260	200
Boxes,	30	—	30	23	7
Brick,	20	—	20	12	8
Building,	240	6	234	157	83
Carriages and wagons, . .	90	1	89	57	33
Clothing,	160	—	160	124	36
Cotton goods,	150	2	148	111	39
Food preparations, . . .	70	—	70	33	37
Furniture,	100	1	99	78	22
Leather,	160	3	157	75	85
Machines and machinery, .	150	2	148	113	37
Metals and metallic goods, .	270	—	270	191	79
Musical instruments, . .	40	—	40	28	12
Paper,	70	1	69	48	22
Printing and publishing, .	100	—	100	87	13
Rubber and elastic goods, .	25	2	23	18	7
Stone,	40	—	40	31	9
Tobacco,	30	1	29	19	11
Wooden goods,	70	—	70	44	26
Woollen goods,	150	4	146	110	40
Worsted goods,	15	3	12	8	7
Totals,	2,440	29	2,411	1,627	813

Realizing that any basis of interest and expenses must necessarily be an arbitrary one, we adopted the six and ten per cent basis as the one best sustained by previous investigations; and not until the thirty thousand arithmetical computations in this Part were completed, did we know, or could we know, the results of using such a basis.

We find but 29 establishments out of the 2,440 losing money or not making a gross profit during the year; that is, in a trifle over one per cent of the establishments the amount paid out for stock and wages was greater than the amount received for the manufactured goods. The distribution of this number by industries is shown in the table, the building industry showing six such firms. Of the 2,440 establishments, 2,411, or 98+ per cent, made a gross profit;

that is, sold their product for more than the cost of stock and the outlay for wages. Of these 2,411 establishments making a gross profit, 1,627, or 67+ per cent, cleared a net profit over and above the sum of the estimated six per cent on capital invested as interest, and the ten per cent of value of product for running expenses. The remaining 784 establishments, or 32+ per cent, did not make enough gross profit to enable them to bear such a heavy interest and expense

BOOTS AND SHOES.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
No. 1	275	\$150,000	\$110,000	\$590,000	\$780,000	\$80,000	10.26
2	43	25,000	16,000	60,300	89,080	12,780	14.35
3	22	20,000	8,232	23,023	37,500	6,245	16.65
4	26	42,000	12,000	39,200	60,000	8,800	14.67
5	32	30,000	9,814	23,032	39,189	6,343	16.19
6	125	25,000	13,000	175,000	340,000	152,000	44.70
7	125	50,000	13,000	300,000	375,000	62,000	16.53
8	18	5,000	5,715	17,000	25,400	2,685	10.57
9	31	1,000	11,000	25,500	40,000	3,500	8.75
10	95	20,000	28,000	47,000	85,000	10,000	11.76
11	46	4,000	20,000	35,000	61,415	6,415	10.44
12	52	12,000	12,000	53,400	76,000	10,600	13.95
13	17	15,000	8,000	14,145	25,000	2,855	11.42
14	20	2,000	5,000	20,000	30,000	5,000	16.66
15	55	5,000	15,000	40,000	60,100	5,100	8.48
16	20	2,000	5,500	7,566	15,000	1,934	12.90
17	20	3,000	6,000	15,000	24,000	3,000	12.50
18	53	10,000	20,000	52,000	80,000	8,000	10.00
19	125	25,000	40,000	82,650	140,000	17,350	12.39
20	143	70,000	43,685	134,600	200,000	21,715	10.85
21	18	15,000	10,000	30,500	45,000	4,500	10.00
22	270	100,000	105,600	331,419	500,350	63,331	12.65
23	288	125,000	130,000	454,783	650,000	65,217	10.03
24	250	75,000	115,000	183,614	360,250	61,646	17.11
25	80	20,000	25,000	54,000	85,000	6,000	7.05
26	175	75,000	60,000	210,000	300,000	30,000	10.00
27	155	30,000	60,000	100,000	177,000	17,000	9.60
28	140	50,000	72,800	219,700	342,616	50,116	14.63
29	250	100,000	100,500	345,000	468,700	23,200	4.94
30	300	150,000	122,000	348,000	500,000	30,000	6.00
31	23	5,000	9,000	21,500	35,900	4,500	12.86
32	115	20,000	45,000	122,163	180,000	12,837	7.13
33	257	25,000	100,000	265,000	400,000	35,000	8.75
34	110	50,000	36,600	80,573	133,700	16,527	12.36
35	125	20,000	54,000	134,000	215,000	27,000	12.56
36	145	65,000	49,872	161,271	236,516	25,373	10.72
37	500	200,000	250,000	462,500	750,000	37,500	5.00
38	100	50,000	20,830	35,885	62,500	5,785	9.26
39	150	35,000	75,000	125,000	225,000	25,000	11.11
40	200	50,000	80,448	229,100	336,000	26,452	7.87

account; in other words, about one-third of the firms, notably in the boot and shoe industry, do business on a smaller margin of expenses, for, as we have before seen, only 29 establishments of the 2,440 failed to clear a gross profit. The question of net profit then becomes comparative and not actual, and its discussion can be much more understandingly carried on in the final analysis of the tables of Profits and Earnings, which tables we now present.

BOOTS AND SHOES.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employé.	Average yearly net profit per employé.	Average yearly earnings of each employé.	ESTABLISHMENTS.
\$87,000	—\$7,000	75.64	14.10	11.16	— .90	\$2,836	—\$25 00	\$400	1
10,408	2,372	67.69	17.96	11.69	2.66	2,071	55 00	372	2
4,950	1,295	61.40	21.95	13.20	3.45	1,704	58 00	374	3
8,520	280	65.33	20.00	14.20	.47	2,307	10 00	461	4
5,719	624	58.77	25.04	14.60	1.59	1,224	19 00	306	5
35,500	116,500	51.47	3.83	10.44	34.26	2,720	932 00	104	6
40,500	21,500	80 00	3.47	10.80	5 73	3,000	172 00	104	7
2,840	—155	66.93	22.50	11.18	— .61	1,411	—8 00	317	8
4,060	—560	63.75	27.50	10.15	—1.40	1,290	—18 00	354	9
9,700	300	55.30	32.94	11.41	.35	894	3 00	294	10
6,382	33	56.99	32.57	10.39	.05	1,335	71	434	11
8,320	2,280	70.26	15.79	10 95	3.00	1,461	43 00	230	12
3,400	—545	56.58	32.00	13.60	—2.18	1,470	—32 00	470	13
3,120	1,880	66.67	16.67	10.40	6.26	1,500	94 00	250	14
6,310	—1,210	66.56	24.96	10.49	—2 01	1,092	—22 00	272	15
1,620	314	50.44	36.66	2 10	10.80	750	15 00	275	16
2,580	420	62.50	25.00	10.75	1.75	1,200	21 00	300	17
8,600	—600	65.00	25.00	10.75	—7.5	1,509	—11 00	377	18
15,500	1,850	59.04	28.57	11.07	1.32	1,120	14 00	320	19
24,200	—2,485	67.30	21.85	12.10	—1.25	1,398	—17 09	305	20
5,400	—900	67.78	22.22	12.00	—2.00	2,500	—50 00	555	21
56,035	7,296	66.24	21.11	11.19	1.46	1,853	27 00	391	22
72,500	—7,283	69.97	20.00	11.15	—1 12	2,256	—25 00	451	23
40,525	21,121	50.97	31.92	11.25	5.86	1,441	84 00	460	24
9,700	—3,700	63.53	29.42	11.41	—4.36	1,062	—46 00	312	25
34,500	—4,500	70.02	20.00	11.50	—1.50	1,714	—25 00	342	26
19,500	—2,500	56.50	33.90	11 01	—1.41	1,141	—16 00	387	27
37,262	21,854	64.12	21 25	10 88	3 75	2,447	91 00	520	28
52,870	—29,670	73.61	21.45	11.27	—6.33	1,874	—118 00	402	29
59,000	—29,000	69.60	24.40	11.80	—5.80	1,666	—96 00	406	30
3,800	700	61.43	25.71	10.86	2.00	1,521	30 00	391	31
19,200	—6,363	67.86	25.01	10.66	—3.53	1,565	—55 00	391	32
41,500	—6,500	66.25	25.00	10.37	—1.62	1,556	—25 00	389	33
16,370	157	60.26	27.38	12.24	.12	1,215	1 42	332	34
22,700	4,300	62.32	25.12	10.56	2.00	1,720	34 00	432	35
27,552	—2,179	68.19	21.09	11 64	— .92	1,631	—15 00	343	36
87,000	—49,500	61.67	33.33	11.60	—6.60	1,500	—99 00	500	37
9,250	—3,465	57 41	33.33	14.80	—5.54	625	—34 00	208	38
24,600	400	55.56	33.33	10.93	.18	1,500	2 66	500	39
36,600	—10,148	68.19	23.94	10.89	—3 02	1,680	—50 00	402	40

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit	Percentage of gross profit of value of product.
41	242	\$75,000	\$115,092	\$317,468	\$470,356	\$37,796	8.03
42	80	6,000	25,488	49,500	78,159	3,171	4.05
43	45	8,000	20,000	40,000	66,000	6,000	9.10
44	346	104,000	150,063	454,993	650,825	45,769	7.02
45	36	20,000	16,000	28,000	50,050	6,050	12.08
46	100	20,000	30,000	91,900	148,000	26,100	17.63
47	400	35,000	175,000	458,000	663,500	30,500	4.59
48	175	40,000	48,000	136,700	225,000	40,300	17.91
49	99	25,000	53,990	128,660	225,700	43,050	19.07
50	80	30,000	30,500	91,110	146,250	24,640	16.85
51	37	12,000	14,000	26,000	43,000	3,000	6.97
52	99	50,000	55,000	215,000	300,000	30,000	10.00
53	40	25,000	22,000	50,000	80,000	8,000	10.00
54	35	10,000	10,000	50,000	65,000	5,000	7.69
55	110	50,000	40,000	170,000	250,000	40,000	16.00
56	225	75,000	75,000	200,000	298,000	23,000	7.71
57	210	180,000	120,000	553,000	746,000	73,000	9.78
58	50	50,000	35,000	62,800	116,000	18,200	15.68
59	75	50,000	38,000	75,000	125,000	12,000	9.60
60	40	7,000	10,000	31,000	48,000	4,000	8.33
61	80	40,000	41,600	106,000	160,000	12,400	7.75
62	35	15,000	15,000	34,200	54,000	4,800	8.88
63	21	8,000	8,000	20,200	30,000	1,800	6.00
64	24	10,000	10,800	18,300	33,400	4,300	12.88
65	21	3,000	9,000	17,775	30,000	3,225	10.75
66	15	5,500	7,200	12,475	22,000	2,325	10.56
67	40	5,000	13,700	28,600	45,000	2,700	6.00
68	28	15,000	5,760	23,300	31,500	2,440	7.74
69	31	40,000	16,000	56,500	76,000	3,500	4.60
70	85	19,000	34,548	70,000	116,000	11,452	9.87
71	42	5,000	13,500	51,800	72,000	6,700	9.30
72	25	1,600	8,000	9,500	20,000	2,500	12.50
73	42	5,000	10,000	12,000	25,000	3,000	12.00
74	30	8,000	8,835	20,500	33,000	3,665	11.10
75	290	100,000	58,500	222,500	305,000	24,000	7.87
76	14	4,000	8,650	5,000	18,500	4,850	26.21
77	20	5,100	6,900	10,800	20,000	2,300	11.05
78	23	4,000	7,000	22,250	32,000	2,750	8.59
79	20	3,000	8,859	23,850	36,000	3,291	9.14
80	33	5,000	11,500	34,350	54,000	8,150	15.09
81	37	5,000	10,000	35,300	54,000	8,700	16.11
82	20	5,000	5,500	7,825	15,900	2,575	16.19
83	92	60,000	46,150	178,000	248,000	23,850	9.61
84	15	2,000	5,000	8,500	15,736	2,236	14.21
85	25	800	8,775	12,640	24,000	2,585	10.78
86	84	25,000	27,500	120,565	162,890	14,825	9.10
87	36	40,000	12,618	35,472	52,714	4,624	8.77
88	29	1,600	7,300	16,397	28,545	4,848	16.98
89	65	30,000	25,700	69,872	109,000	13,428	12.31
90	23	10,000	9,500	31,600	50,075	8,975	17.92
91	41	15,000	21,625	53,575	87,750	12,550	14.31
92	34	15,000	13,000	25,840	44,000	5,160	11.72
93	130	75,000	50,000	150,000	230,000	30,000	13.04
94	135	40,000	48,000	143,500	212,000	20,500	9.66
95	56	25,000	26,287	76,137	111,530	9,106	8.16

BOOTS AND SHOES — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$51,536	—\$13,740	67.49	24.48	10.95	—2.92	\$1,943	—\$56 00	\$475	41
8,176	—5,005	63.33	32.62	10.46	—6.41	976	—62 00	318	42
7,080	—1,080	60.60	30.30	10.73	—1.63	1,466	—24 00	444	43
71,323	—25,554	69.92	23.06	10.95	—3.93	1,880	—73 00	433	44
6,205	—155	55.95	31.97	12.39	—31	1,390	—4 30	444	45
16,000	10,100	62.10	20.27	10.81	6.82	1,480	101 00	300	46
68,450	—37,950	69.03	26.38	10.31	—5.72	1,658	—94 00	437	47
24,900	15,400	60.76	21.33	11.06	6.85	1,285	88 00	274	48
24,070	18,980	57.01	23.52	10.66	8.41	2,279	191 00	545	49
16,425	8,215	62.30	20.85	11.23	5.62	1,828	102 00	381	50
5,020	—2,020	60.47	32.56	11.67	—4.70	1,162	—54 00	378	51
33,000	—3,000	71.67	18.33	11.00	—1.00	3,030	—30 00	555	52
9,500	—1,500	62.50	27.50	11.87	—1.87	2,000	—37 00	550	53
7,100	—2,100	76.92	15.39	10.92	—3.23	1,857	—60 00	285	54
28,000	12,000	68.00	16.00	11.20	4.80	2,272	109 00	363	55
34,300	—11,300	67.12	25.17	11.51	—3.80	1,324	—50 00	333	56
85,400	—12,400	74.13	16.09	11.44	—1.66	3,552	—59 00	571	57
14,600	3,600	54 14	30.18	12.58	3.10	2,320	72 00	700	58
15,500	—3,500	60.00	30.40	12.40	—2.80	1,666	—46 00	506	59
5,220	—1,220	70 84	20.83	10.87	—2.54	1,200	—30 00	250	60
18,400	—6,000	62 25	26.00	11.50	—3.75	2,000	—75 00	520	61
6,300	—1,500	63.34	27.78	11.66	—2.78	1,542	—42 00	428	62
3,480	—1,680	67.33	26.67	11.60	—5.60	1,428	—80 00	380	63
3,940	360	54.79	32.33	11.80	1.08	1,391	15 00	450	64
3,180	45	59.25	30.00	10.60	.15	1,429	2 14	428	65
2,530	—205	56.71	32 73	11.50	—94	1,466	—13 00	480	66
4,800	—2,100	63.56	30.44	10.66	—4.66	1,125	—52 00	342	67
4,050	—1,610	73.97	18.29	12.85	—5.11	1,125	—57 00	205	68
10,000	—6,500	74.34	21 06	13.15	—8.55	2,451	—209 00	516	69
12,740	—1,288	60 34	29.79	10.98	—1.11	1,364	—15 00	406	70
7,500	—800	71.95	18.75	10.41	—1 11	1,714	—19 00	321	71
2,096	404	47.50	40.00	10.48	2 02	800	16 00	320	72
2,800	200	48.00	40 00	11.20	.80	585	4 76	238	73
3,780	—115	62.12	26.78	11.45	—3.35	1,100	—3 83	294	74
36,500	—12,500	72.95	19 18	11.96	—4.09	1,051	—43 00	201	75
2,090	2,760	27 03	46.76	11.29	14.92	1,321	197 00	618	76
2,306	—6	54.00	34.50	11.53	—03	1,000	— 30	345	77
3,440	—690	69.53	21.88	10.75	—2.16	1,391	—30 00	305	78
3,780	—489	66.25	24.61	10 50	—1.36	1,800	—24 00	442	79
5,700	2,450	63.61	21.30	10.55	4 54	1,636	74 00	348	80
5,700	3,000	65.37	18.52	10.55	5.56	1,459	81 00	270	81
1,890	685	49 22	34.59	11.88	4.31	795	34 00	275	82
28,400	—4,550	71.78	18 61	11.04	—1.43	2,695	—49 00	501	83
1,694	542	54.02	31.77	10.77	3.44	1,049	36 00	333	84
2,448	137	52.65	36.57	10.20	.58	960	5 48	351	85
17,789	—2,964	74.01	16.89	10.92	—1.82	1,939	—35 00	327	86
7,671	—3,047	67.29	23.94	14.55	—5.78	1,464	—84 00	350	87
2,951	1,897	57.44	25.58	10.34	6.64	984	65 00	251	88
12,700	728	64.11	23 58	11.65	.66	1,676	11 00	395	89
5,608	3,367	63.11	18.97	11.20	6.72	2,177	146 00	413	90
9,675	2,875	61.05	24.64	11.03	3.28	2,140	70 00	527	91
5,300	—140	58.73	29.55	12.04	—3.32	1,294	—4 11	382	92
27,500	2,500	65.22	21.74	11.95	1.09	1,769	19 00	384	93
23,600	—3,100	67.69	22.65	11.13	—1.47	1,570	—22 00	355	94
12,653	—3,547	68.27	23.57	11.34	—3.18	1,991	—63 00	469	95

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
96	38	\$9,000	\$12,000	\$38,000	\$59,000	\$9,000	15.25
97	48	13,000	19,500	43,250	70,000	7,250	10.35
98	13	10,000	5,000	19,000	27,000	3,000	11.11
90	12	5,000	5,400	7,500	15,000	2,100	14.00
100	57	37,000	25,844	54,116	95,000	15,040	15.83
101	329	65,000	180,119	535,621	736,742	21,002	2.85
102	25	5,000	6,390	23,440	32,500	2,670	8.21
103	45	5,500	18,000	37,000	60,000	5,000	8.33
104	35	7,000	17,000	50,000	78,000	11,000	14.10
105	100	35,000	46,268	182,820	254,935	25,847	10.13
106	40	5,000	12,000	17,000	33,000	4,000	12.12
107	100	25,000	20,000	60,000	100,000	20,000	20.00
108	150	18,000	36,000	52,608	101,400	12,792	12.62
109	23	5,000	10,000	30,000	50,000	10,000	20.00
110	15	5,000	6,200	13,800	25,000	5,000	20.00
111	70	8,000	21,500	44,500	83,870	17,870	21.31
112	12	5,500	5,053	6,950	13,587	1,584	11.65
113	260	50,000	77,298	275,000	406,944	54,646	13.42
114	120	40,000	35,000	202,000	2 3,000	6,000	2.46
115	125	75,000	55,000	210,000	275,000	10,000	3.63
116	200	100,000	54,000	250,000	350,000	46,000	13.14
117	26	5,000	5,600	12,600	20,660	2,460	11.90
118	75	25,000	43,500	115,000	175,500	17,000	9.68
119	102	75,000	58,000	225,000	325,000	42,000	12.92
120	86	45,000	55,000	180,000	250,000	15,000	6.00
121	73	45,000	45,000	93,500	150,000	11,500	7.66
122	118	20,000	47,000	144,000	210,000	19,000	9.05
123	57	7,000	20,000	40,000	65,000	5,000	7.69
124	13	2,000	5,500	7,800	16,000	2,700	16.87
125	70	18,000	36,500	98,500	142,000	7,000	4.92
126	77	35,000	35,000	73,360	110,000	1,640	1.49
127	50	15,000	33,750	82,000	122,500	6,750	5.51
128	72	5,000	26,800	47,000	80,410	6,610	8.22
129	150	20,000	42,187	158,000	245,000	44,813	18.29
130	108	35,000	65,000	161,000	241,800	15,800	6.53
131	32	2,000	12,920	27,500	42,000	1,580	3.76
132	60	4,000	14,000	20,000	43,600	9,600	22.01
133	250	150,000	75,000	200,000	300,000	25,000	8.33
134	27	15,000	8,000	30,285	50,000	11,715	23.43
135	143	38,000	38,414	113,291	179,094	27,389	15.29
136	50	8,000	12,000	28,250	48,000	7,750	16.14
137	360	120,000	108,510	310,471	463,689	44,708	9.64
138	76	6,000	30,000	60,000	100,200	10,200	10.18
139	62	10,000	23,400	47,000	80,000	9,600	12.00
140	31	4,000	11,700	16,100	34,700	6,900	19.88
141	20	8,000	10,000	15,900	30,000	4,100	13.67
142	100	25,000	25,000	100,000	165,000	40,000	24.24
143	75	12,000	27,000	60,000	92,400	5,400	5.85
144	85	50,000	42,000	132,900	188,261	13,361	7.10
145	14	6,000	6,200	9,636	19,412	3,576	18.42
146	16	8,000	5,000	14,906	22,975	3,069	13.35
147	35	10,000	12,800	31,500	50,000	5,700	11.40
148	17	10,000	5,000	4,500	12,000	2,500	20.83
149	56	35,200	28,000	38,800	75,000	8,200	10.93
150	40	5,000	10,000	14,000	27,500	3,500	12.73

BOOTS AND SHOES — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$6,440	\$2,560	64.41	20.34	10.91	4.34	\$1,552	\$67 00	\$315	96
7,780	—530	61.79	27.86	11 11	—76	1,457	—11 00	406	97
3,300	—300	70.37	18.52	12.22	—1.11	2,070	—23 00	384	98
1,800	300	50.00	36.00	12.00	2.00	1,250	25 00	450	99
11,720	3,320	56.97	27.20	12 33	3.50	1,666	58 00	453	100
77,574	—56,572	72.70	24.45	10.52	—7.67	2,239	—171 00	547	101
3,550	—880	72.13	19.66	10.92	—2.71	1,300	—35 00	255	102
6,330	—1,330	61.67	30.00	10.55	—2.22	1,333	—29 00	400	103
8,220	2,780	64.10	21.80	10.54	3 56	2,228	79 00	485	104
27,594	—1,747	71.72	18.15	10.82	—69	2,549	—17 00	462	105
3,600	400	51.52	36.36	10.91	1.21	825	10 00	300	106
11,500	8,500	66.00	20.00	11.50	8.50	1,000	85 00	200	107
11,220	1,572	51.88	35.50	11.07	1.55	676	10 00	240	108
5,300	4,700	60.00	20 00	10.60	9.40	2,173	204 00	434	109
2,800	2,200	55.20	24.80	11.20	8.80	1,666	146 00	413	110
8,867	9,003	53.06	25.63	10.58	10.73	1,198	128 00	307	111
1,689	—105	51.16	37.19	12.43	—7.8	1,132	—8 75	421	112
43,694	10,952	67.58	19 00	10.73	2.69	1,565	42 00	297	113
26,700	—20,700	83.13	14 41	10.98	—8.52	2,025	—172 00	291	114
32,000	—22,000	76.37	20.00	11.63	—8.00	2,200	—176 00	440	115
41,000	5,000	71.43	15.43	11.71	1.43	1,750	25 00	270	116
2,366	94	60.99	27.11	11.45	.45	794	3 61	215	117
19,050	—2,050	65.53	24.79	10.85	—1.17	2,340	—27 00	580	118
37,000	5,000	69.23	17.85	11.38	1.54	3,186	49 00	568	119
27,700	—12,700	72.00	22.00	11.08	—5.08	2,906	—147 00	639	120
17,700	—6,200	62.34	30.00	11.80	—4.14	2,054	—84 00	616	121
22,200	—3,200	68.57	22 38	10.57	—1.52	1,779	—27 00	398	122
6,920	—1,920	61 54	30.77	10.64	—2 95	1,140	—33 00	350	123
1,720	980	48.75	34.38	10.75	6.12	1,230	75 00	423	124
15,280	—8,280	69.37	25.71	10.76	—5.84	2,028	—118 00	521	125
13,100	—11,460	66.70	31.81	11.90	—10.41	1,428	—148 00	454	126
21,250	—14,500	66 94	27.55	17 34	—11.83	2,450	—290 00	675	127
8,341	—1,731	58.45	33.33	10 37	—2 15	1,116	—24 00	372	128
25,700	19,113	64.49	17.22	10.48	7.81	1,633	127 00	281	129
26,280	—10,480	66.59	26.88	10.86	—4 33	2,238	—97 00	601	130
4,320	—2,740	65.48	30.76	10.28	—6.52	1,312	—85 00	403	131
4,600	5,000	45.88	32.11	10.55	11.46	726	83 00	233	132
39,000	—11,000	66.67	25.00	13.00	—4.67	1,200	—56 00	300	133
5,900	5,815	60.57	16.00	11.80	11 63	1,851	215 00	296	134
20,189	7,200	63.26	21.45	11.27	4.02	1,252	50 00	268	135
5,280	2,470	58 86	25.00	11.00	5.14	960	49 00	240	136
53,569	—8,861	66.96	23.40	11.55	—1.91	1,288	—24 00	301	137
10,380	—180	59 88	29.94	10.35	—1.17	1,318	—2 36	394	138
8,600	1,000	58.75	29.25	10.75	1.25	1,290	16 00	377	139
3,710	3,190	43.40	33.72	10.69	9.19	1,119	102 00	377	140
3,480	620	53.00	33.33	11.60	2 07	1,500	31 00	500	141
18,000	22,000	60.61	15.15	10.91	13.33	1,650	220 00	250	142
9,960	—4,560	64.93	29.22	10.78	—4.93	1,232	—60 00	360	143
21,826	—8,465	70.59	22.31	11.59	—4.49	2,214	—99 00	494	144
2,301	1,275	49 64	31.94	11.85	6.57	1,386	91 00	442	145
2,778	291	64.88	21.77	12.08	1.27	1,435	18 00	312	146
5,600	100	63.00	25 60	11.20	.20	1,428	2 85	365	147
1,800	700	37.50	41 67	15.00	5.83	705	41 00	294	148
9,612	—1,412	51.74	37.33	12.81	—1.88	1,339	—25 00	500	149
3,050	450	50.91	36.36	11.09	1.64	687	11 00	250	150

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
151	60	\$15,000	\$25,000	\$75,000	\$125,000	\$25,000	20.00
152	75	5,000	20,000	40,000	65,000	5,000	7.69
153	35	10,000	9,700	35,000	50,000	5,300	10.60
154	300	30,000	90,000	110,000	208,000	8,000	3.84
155	91	20,000	30,600	116,000	153,000	6,400	4.18
156	60	10,000	45,000	122,000	180,000	13,000	7.22
157	200	20,000	36,300	42,000	84,700	6,400	7.55
158	33	6,000	16,300	34,000	65,000	14,700	22.61
159	40	12,000	15,000	27,000	48,000	6,000	12.50
160	105	25,000	12,000	75,000	92,000	5,000	5.44
161	18	7,000	6,600	12,000	20,000	1,400	7.00
162	53	4,000	37,351	75,000	120,000	7,649	6.37
163	50	7,000	15,000	34,000	55,000	6,000	10.91
164	30	25,000	11,000	37,000	51,000	3,000	5.88
165	17	5,000	5,000	11,000	20,625	4,625	22.43
166	17	2,500	6,375	18,000	27,500	3,125	11.36
167	60	25,000	27,000	65,000	96,000	4,000	4.16
168	100	10,000	20,000	28,000	66,000	18,000	27.27
169	140	30,000	90,000	150,000	250,000	10,000	4.00
170	40	10,000	18,000	50,000	80,000	12,000	15.00
171	13	3,000	5,000	13,400	23,000	4,600	20.00
172	50	20,000	19,000	56,000	80,000	5,000	6.25
173	25	2,500	18,000	48,150	84,000	17,850	21.25
174	35	8,000	10,000	26,000	40,000	4,000	10.00
175	73	25,000	40,000	54,000	123,000	29,000	23.57
176	75	12,000	25,000	70,000	112,000	17,000	15.18
177	150	20,000	46,000	90,000	145,000	9,000	6.20
178	13	10,000	7,000	21,000	35,000	7,000	20.00
179	151	42,000	34,000	205,000	300,000	61,000	20.33
180	114	39,000	36,000	81,000	140,000	23,000	16.43
181	240	40,000	84,500	149,672	254,172	20,000	7.86
182	53	5,000	22,000	31,000	72,000	19,000	26.39
183	30	5,000	18,000	35,000	55,000	2,000	3.63
184	100	18,000	40,000	95,000	140,000	5,000	3.57
185	111	25,000	25,000	70,000	97,500	2,500	2.57
186	27	3,000	8,000	17,500	30,000	4,500	15.00
187	355	125,000	160,000	325,000	550,000	65,000	11.82
188	20	8,000	12,000	14,000	29,000	3,000	10.35
189	25	3,000	5,000	5,000	12,000	2,000	16.66
190	60	10,000	18,000	60,000	90,750	12,750	14.05
191	222	15,000	50,000	100,000	160,000	10,000	6.25
192	74	15,000	27,000	46,800	90,600	16,800	18.54
193	28	13,000	12,000	32,000	48,000	4,000	8.33
194	75	10,000	35,000	35,000	75,000	5,000	6.66
195	105	40,000	52,250	66,500	145,000	26,250	18.11
196	115	17,000	43,000	65,000	130,000	22,000	16.92
197	80	15,000	26,000	48,000	91,000	17,000	18.68
198	110	15,000	42,120	66,700	114,969	6,149	5.34
199	106	20,000	35,000	59,000	110,000	16,000	14.54
200	30	3,000	12,000	16,000	30,000	2,000	6.66
201	21	5,000	10,000	23,000	37,000	4,000	10.81
202	217	40,000	35,000	80,000	125,000	10,000	8.00
203	13	2,000	5,000	11,000	20,000	4,000	20.00
204	25	10,000	15,000	35,000	60,000	10,000	16.67
205	100	10,000	50,000	85,000	150,000	15,000	10.00

BOOTS AND SHOES — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employé.	Average yearly net profit per employé.	Average yearly earnings of each employé.	ESTABLISHMENTS.
\$13,400	\$11,600	60.00	20.00	10.72	9.28	\$2,083	\$193 00	\$416	151
6,800	—1,800	61.54	30.77	10.46	—2.77	866	—24 00	266	152
5,600	—300	70.00	19.40	11.20	—60	1,428	—8 57	277	153
22,600	—14,600	52.89	43.27	10.86	—7.02	693	—48 00	300	154
16,500	—10,100	75.82	20.00	10.78	—6.60	1,681	—110 00	336	155
18,600	—5,600	67.78	25.00	10.33	—3.11	3,000	—93 00	750	156
9,670	—3,270	49.59	42.86	11.41	—3.86	423	—16 00	181	157
6,860	7,840	52.31	25.08	10.55	12.06	1,969	237 00	493	158
5,520	480	56.25	31.25	11.50	1.00	1,200	12 00	375	159
10,700	—5,700	81.52	13.04	11.63	—6.19	876	—54 00	114	160
2,420	—1,020	60.00	33.00	12.10	—5.10	1,111	—56 00	366	161
12,240	—4,591	62.50	31.13	10.20	—3.83	2,264	—86 00	704	162
5,920	80	61.82	27.27	10.76	.15	1,100	1 60	300	163
6,600	—3,600	72.55	21.57	12.94	—7 06	1,700	—120 00	366	164
2,363	2,262	53.33	24.24	11.46	10.97	1,213	133 00	294	165
2,900	225	65.46	23.18	10.54	.82	1,617	13 00	375	166
11,100	—7,100	67.71	28.13	11.56	—7.40	1,600	—118 00	450	167
7,200	10,800	42.43	30.30	10.90	16.37	660	108 00	200	168
26,800	—16,800	60.00	36 00	10.72	—6.72	1,785	—120 00	642	169
8,600	3,400	62.50	22.50	10.75	4.25	1,769	163 00	384	170
2,480	2,120	58.26	21.74	10 78	9.22	1,769	163 00	384	171
9,200	—4,200	70.00	23 75	11.50	—5.25	1,600	—84 00	380	172
8,550	9,300	57.32	21.43	10 18	11.07	3,360	372 00	720	173
4,480	—480	65 00	25.00	11.20	—1.20	1,142	—13 00	285	174
13,800	15,200	43.91	32.52	11.21	12.36	1,684	208 00	547	175
11,920	5,080	62 50	22.32	10.61	4.51	1,493	67 00	333	176
15,700	—6,700	62 07	31.73	10.82	—4.62	966	—44 00	306	177
4,100	2,900	60.00	20.00	11.71	8.29	2,692	223 00	538	178
32,520	28,480	68.34	11.33	10.84	9.49	1,986	188 00	225	179
16,340	6,660	57.86	25.71	11.67	4.76	1,228	58 00	315	180
27,817	—7,817	58.89	33.25	10.94	—3.08	1,059	—32 00	352	181
7,500	11,500	43.03	30.55	10 42	15.97	1,358	217 00	415	182
5,800	—3,800	63.64	32.73	10.54	—6.91	1,833	—126 00	600	183
15,080	—10,080	67.86	28.57	10.77	—7.20	1,400	—100 00	400	184
11,250	—8,750	71.79	25.64	11.54	—8.97	878	—78 00	225	185
3,180	1,320	58.33	26.67	10.60	4.40	1,111	49 00	296	186
62,500	2,500	59.09	29.09	11.36	.46	1,549	7 04	450	187
3,380	—380	48.27	41.38	11.65	—1.30	1,450	—19 00	600	188
1,380	620	41 67	41.67	11.50	5 16	480	25 00	200	189
9,675	3,075	66.12	19.83	10.66	3.39	1,512	51 00	360	190
16,900	—6,900	62 50	31.25	10.56	—4.31	720	—31 00	225	191
9,960	6,840	51.66	29 80	10.99	7.55	1,224	92 00	364	192
5,580	—1,580	66.67	25.00	11.62	—3 29	1,714	—56 00	428	193
8,100	—3,100	46 67	46.67	10 80	—4.14	1,000	—41 00	466	194
16,900	9,350	45.86	36.03	11.66	6.45	1,381	89 00	497	195
14,020	7,980	50.00	33.08	10.78	6.14	1,130	69 00	374	196
10,000	7,000	52.75	28.57	10 99	7.69	1,137	87 00	325	197
12,397	—6,248	58.02	36.64	10 78	—5.44	1,045	—56 00	382	198
12,200	3,800	53.64	31.82	11 09	3.45	1,037	35 00	330	199
3,180	—1,180	53.34	40.00	10 60	—3 94	1,000	—39 00	400	200
4,000	—	62.16	27.03	10.81	—	1,762	—	476	201
14,900	—4,900	64.00	28.00	11.92	—3.92	576	—22 00	161	202
2,120	1,880	55.00	25.00	10.60	9.40	1,538	144 00	384	203
6,600	3,400	58.33	25.00	11.00	5.67	2,400	136 00	600	204
15,600	—600	56.67	33.33	10.40	—40	1,500	—6 00	500	205

BOOTS AND SHOES -- Continued.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
206	29	\$2,500	\$10,000	\$15,000	\$35,000	\$10,000	28.57
207	133	30,000	40,000	360,000	500,000	100,000	20.00
208	35	6,000	12,000	20,000	40,000	8,000	20.00
209	18	5,000	7,200	11,000	20,000	1,800	9.00
210	80	20,000	32,000	63,400	100,000	4,600	4.60
211	39	1,500	15,500	27,350	45,000	2,150	4.77
212	30	10,000	10,000	25,000	45,000	10,000	22.22
213	150	8,000	40,400	78,400	159,000	40,200	25.28
214	100	10,000	30,000	44,000	100,000	26,000	26.00
215	240	40,000	84,500	149,672	254,172	20,000	7.86
216	60	8,000	18,720	26,600	48,000	2,680	5.58
217	250	60,000	40,000	200,000	250,000	10,000	4.00
218	115	18,000	35,000	43,000	100,000	22,000	22.00
219	44	25,000	25,000	46,185	78,000	6,815	8.73
220	100	15,000	30,000	67,000	100,000	3,000	3.00
221	50	5,000	30,000	24,000	68,000	14,000	20.59
222	40	8,000	20,000	36,000	60,000	4,000	6.66
223	16	8,500	6,741	16,798	28,520	4,981	17.47
224	50	9,000	15,000	25,000	45,000	5,000	11.11
225	16	600	7,000	11,000	20,250	2,250	11.11
226	42	3,000	12,600	30,200	50,000	7,200	14.40
227	75	6,000	30,000	60,000	100,000	10,000	10.00
228	32	10,000	15,000	22,500	37,500	-	-
229	80	20,000	30,484	78,000	117,570	9,086	7.72
230	33	500	15,000	30,000	54,000	9,000	16.66
231	80	20,000	20,000	75,000	100,000	5,000	5.00
232	87	50,000	70,000	100,000	190,016	20,016	10.54
233	105	25,000	45,000	85,000	140,000	10,000	7.15
234	31	12,000	8,000	30,000	45,000	7,000	15.55
235	250	8,000	10,000	30,000	50,000	10,000	20.00
236	17	25,000	7,200	250,000	270,000	12,800	4.74
237	12	2,000	7,200	60,000	75,000	7,800	10.40
238	13	7,500	7,000	70,000	80,000	3,000	3.75
239	9	26,000	5,000	213,000	250,000	32,000	12.80
240	43	5,000	11,000	20,000	36,000	5,000	13.88
241	98	20,000	22,000	44,000	88,000	22,000	25.00
242	27	1,000	6,000	10,000	20,000	4,000	20.00
243	36	15,000	15,000	35,000	60,000	10,000	16.67
244	25	10,000	19,000	43,000	67,000	5,000	7.46
245	85	25,000	50,000	60,000	125,000	15,000	12.00
246	36	25,000	20,000	27,100	56,000	8,900	15.89
247	50	5,000	25,000	40,400	63,500	—1,900	—2.99
248	25	5,000	10,000	31,500	50,000	8,500	17.00
249	170	100,000	80,000	225,671	355,000	49,329	13.89
250	300	200,000	130,000	280,000	500,000	90,000	18.00
251	500	150,000	200,000	400,000	700,000	100,000	14.29
252	375	125,000	150,000	328,750	600,000	121,250	20.20
253	270	100,000	75,000	178,000	300,000	47,000	15.67
254	300	125,000	150,000	323,333	600,000	126,667	21.11
255	25	3,000	6,000	15,000	25,000	4,000	16.00
256	80	30,000	30,000	110,000	175,000	35,000	20.00
257	50	8,000	26,000	80,000	120,000	14,000	11.66
258	25	10,000	12,500	43,500	70,000	14,000	20.00
259	35	9,000	12,000	28,000	50,000	10,000	20.00
260	25	8,000	15,000	52,500	85,000	17,500	20.58

BOOTS AND SHOES — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
83,650	86,350	42.86	28.57	10.43	18.14	\$1,206	\$219 00	\$345	206
51,800	48,200	72 00	8 00	10.36	9.64	3,759	362 00	300	207
4,360	3,640	50.00	30.00	10 90	9.10	1,143	104 00	342	208
2,300	—500	55 00	36.00	11.50	—2.50	1,111	—27 00	400	209
11,200	—6,600	63.40	32.00	11.20	—6.60	1,250	—82 00	400	210
4,590	—2,440	60.78	34.45	10.20	—5.43	1,153	—62 00	397	211
5,100	4,900	55.56	22.22	11.33	10.89	1,500	163 00	333	212
16,380	23,820	49.31	25.41	10.30	14 98	1,060	158 00	269	213
10,600	15,400	44.00	30.00	10 60	15.40	1,000	154 00	300	214
27,817	—7,817	58.89	33 25	10.94	—3.08	1,059	—32 00	352	215
5,280	—2,600	55.42	39.00	11.00	—5.42	800	—43 00	312	216
28,600	—18,600	80 00	16 00	11.44	—7.44	1,000	—74 00	160	217
11,080	10,920	43.00	35.00	11.08	10.92	869	94 00	304	218
9,300	—2,485	59.22	32.05	11.92	—3.19	1,772	—56 00	568	219
10,900	—7,900	67.00	30.00	10.90	—7.90	1,000	—79 00	300	220
7,100	6,900	35.29	44.12	10.44	10.15	1,360	138 00	600	221
6,480	—2,480	60.00	33 34	10.80	—4 14	1,500	—62 00	500	222
3,362	1,619	58 90	23.63	11 79	5.63	1,782	101 00	421	223
5,040	—40	55.56	33.33	11.20	—0.9	900	—80	300	224
2,061	189	54.32	34.57	10 17	.94	1,265	11 00	437	225
5,180	2,020	60.40	25.20	10.36	4.04	1,190	48 00	300	226
10,360	—360	60.00	30.00	10.36	—36	1,333	—4 80	400	227
4,350	—4,350	60.00	40.00	11 60	—11.60	1,471	—136 00	468	228
12,957	—3,871	66.34	25.94	11.02	—3.30	1,469	—48 00	381	229
5,430	3,570	55.56	27.78	10.05	6.61	1,636	108 00	454	230
11,200	—6,200	75.00	20.00	11.20	—6.20	1,250	—77 00	250	231
22,002	—1,986	52 62	36.84	11.58	—1.04	2,184	—22 00	804	232
15,500	—5,500	60.71	32 14	11.07	—3 92	1,335	—52 00	428	233
5,220	1,780	66.67	17.78	11.60	3.95	1,451	57 00	258	234
5,480	4,520	60.00	20.00	10 96	9.04	200	18 00	40	235
28,500	—15,700	92.59	2.67	10.55	—5.81	15,832	—1,676 00	424	236
7,620	180	80 00	9.60	10.16	.24	6,250	15 00	600	237
8,450	—5,450	87 50	8.75	10 56	—6.81	6,154	—419 00	538	238
26,560	5,440	85.20	2.00	10.62	2.18	27,777	604 00	555	239
3,900	1,100	55.56	30.56	10.83	3.05	837	25 60	255	240
10,000	12,000	50 00	25.00	11.36	13.64	897	122 00	224	241
2,060	1,940	50.00	30.00	10.30	9 70	740	71 00	222	242
6,900	3,100	58.33	25.00	11.50	5.17	1,666	86 00	416	243
7,300	—2,300	64.18	28.36	10 89	—3.43	2,680	—92 00	760	244
14,000	1,000	45.00	10.00	11.20	.80	1,470	11 00	588	245
7,100	1,800	48 39	35.72	12.67	3.22	1,555	50 00	555	246
6,650	—8,550	63.62	39.37	10.47	—13.46	1,270	—171 00	500	247
5,300	3,200	63 00	20.00	10.60	6.40	2,000	128 00	400	248
41,500	7,829	63.57	22 54	11.69	2.20	2,088	46 00	470	249
62,000	28,000	56.00	26.00	12.40	5.60	1,666	93 00	433	250
79,000	21,000	57.14	28.57	11.29	3.00	1,400	42 00	400	251
67,500	53,750	54.80	25.00	11.25	8.95	1,600	143 00	400	252
36,000	11,000	59 33	25.00	12 00	3.67	1,111	40 00	277	253
67,500	59,167	53.89	25.00	11.25	9.86	2,000	197 00	500	254
2,680	1,320	60.00	24.00	10.72	5.28	1,000	52 00	240	255
19,300	15,700	62 86	17.14	11.03	8.97	2,187	196 00	375	256
12,480	1,520	66 67	21.67	10.40	1.26	2,400	30 00	520	257
7,600	6,400	62 14	17.86	10 86	9.14	2,800	256 00	500	258
5,540	4,460	56.00	24 00	11.08	8.92	1,428	127 00	342	259
8,980	8,520	61.77	17.65	10.56	10.02	3,400	310 00	600	260

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
261	50	\$6,000	\$30,000	\$66,000	\$100,000	\$10,000	10.00
262	20	5,000	9,500	40,000	60,000	10,500	17.50
263	27	2,500	5,000	12,900	20,000	2,100	10.50
264	40	6,500	10,000	20,000	45,000	15,000	33.33
265	17	10,000	5,880	10,000	18,000	2,120	11.77
266	20	3,000	5,200	13,000	22,000	3,800	17.27
267	100	20,000	72,300	160,000	285,000	52,700	18.48
268	53	8,000	15,718	27,519	47,287	4,050	8.56
269	30	20,000	13,000	25,000	60,000	22,000	36.66
270	31	,000	15,000	48,900	80,000	16,100	20.12
271	30	6,000	13,600	52,000	80,000	14,400	18.00
272	20	1,000	6,500	19,230	30,000	4,270	14.23
273	150	43,000	67,000	130,000	240,000	43,000	17.91
274	90	35,000	48,000	128,000	200,000	24,000	12.00
275	75	10,000	30,000	140,000	216,000	46,000	21.29
276	85	7,000	25,000	68,100	110,000	16,900	15.36
277	41	4,000	12,500	41,433	66,810	12,877	19.27
278	20	3,000	9,500	14,400	30,000	6,100	20.33
279	23	4,500	10,000	18,200	35,000	6,800	19.42
280	27	10,000	12,000	26,533	48,000	9,467	19.72
281	35	5,000	15,000	28,500	52,000	8,500	16.34
282	33	2,000	12,000	24,890	46,000	9,110	19.80
283	15	1,000	5,400	10,500	20,000	4,100	20.50
284	19	2,000	6,500	20,000	32,000	5,500	17.18
285	75	40,000	50,000	77,100	150,000	22,900	15.26
286	27	13,000	12,220	36,000	60,000	11,780	19.63
287	20	5,000	10,800	27,100	46,000	8,100	17.60
288	35	10,000	12,600	38,000	60,000	9,400	15.66
289	25	5,000	7,000	21,300	35,000	6,700	19.14
290	30	25,000	19,350	42,000	75,000	13,650	18.20
291	150	35,000	80,000	140,000	250,000	30,000	12.00
292	35	18,000	24,000	57,240	100,000	18,760	18.76
293	65	16,000	20,000	38,400	70,000	11,600	16.57
294	32	8,000	15,000	35,000	60,000	10,000	16.66
295	83	25,000	45,000	100,000	175,000	30,000	17.14
296	25	7,000	7,000	22,560	36,000	6,440	17.88
297	200	125,000	115,000	208,000	340,000	17,000	5.00
298	30	17,000	15,000	24,700	48,000	8,300	17.29
299	60	15,000	33,000	55,000	100,000	12,000	12.00
300	30	12,000	10,000	17,600	35,000	7,400	21.14
301	50	10,000	25,000	38,520	75,000	11,480	15.30
302	108	20,000	45,000	89,900	165,000	30,100	18.24
303	70	25,000	30,000	87,500	150,000	32,500	21.66
304	200	80,000	70,000	166,000	280,000	44,000	15.71
305	59	20,000	25,000	56,500	100,000	18,500	18.50
306	12	5,000	6,240	20,000	40,000	13,760	34.40
307	216	100,000	75,000	165,000	295,000	55,000	18.64
308	90	100,000	75,000	140,000	225,000	10,000	4.44
309	90	10,000	30,000	54,133	100,000	15,867	15.86
310	20	10,000	7,500	41,480	65,000	16,020	24.64
311	15	3,500	5,500	24,200	36,000	6,300	17.50
312	100	40,000	50,000	85,000	150,000	15,000	10.00
313	85	30,000	50,000	75,000	150,000	25,000	16.66
314	176	90,000	90,000	225,700	400,000	84,300	21.07
315	20	8,000	7,500	25,800	40,000	6,700	16.75

BOOTS AND SHOES — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$10,360	—\$360	60.00	30.00	10.36	—36	\$2,000	—\$7 20	\$600	261
6,300	4,200	66.67	15.83	10.50	7.00	3,000	210 00	475	262
2,150	—50	64.50	25 00	10.75	—25	740	—1 85	185	263
4,890	10,110	44.45	22.22	10.86	22.47	1,125	252 00	250	264
2,400	—280	55.56	32.67	13.33	—1.56	1,058	—16 00	345	265
2,380	1,420	59.10	23.63	10.81	6.46	1,100	71 00	260	266
29,700	23,000	56.15	25.37	10.42	8.06	2,850	230 00	723	267
5,029	—979	58.20	33 24	10.63	—2.07	892	—18 00	296	268
7,200	14,800	41.67	21.67	12.00	24.66	2,000	493 00	493	269
8,180	7,920	61.13	18.75	10 22	9.90	2,580	255 00	483	270
8,360	6,040	65.00	17.00	10.45	7.55	2,666	201 00	453	271
3,060	1,210	64.10	21.67	10.20	4.03	1,500	60 00	325	272
26,580	16,420	54.17	27.92	11.07	6.84	1,600	109 00	446	273
22,100	1,900	64.00	24.00	11.05	.95	2,222	21 00	533	274
22,200	23,800	64.82	13.89	10.27	11.02	2,880	317 00	400	275
11,420	5,480	61.91	22.73	10 38	4.98	1,294	64 00	294	276
6,921	5,956	62.02	18.71	10.35	8.92	1,629	145 00	304	277
3,180	2,920	48.00	31.67	10.60	9.73	1,500	146 00	475	278
3,770	3,030	52.00	28.58	10.77	8.65	1,521	131 00	434	279
5,400	4,067	55 28	25.00	11 25	8.47	1,777	150 00	444	280
5,500	3,000	54.81	28.85	10.57	5.77	1,485	85 00	428	281
4,720	4,390	54.11	26.09	10.26	9.54	1,393	90 00	363	282
2,060	2,040	52.50	27.00	10 30	10.20	1,333	136 00	360	283
3,320	2,180	62.50	20.32	10.37	6.81	1,684	114 00	342	284
17,400	5,500	51.40	33.34	11.60	3.66	2,000	73 00	666	285
6,780	5,000	60.00	20.37	11.30	8.33	2,222	185 00	452	286
4,900	3,200	58.93	23.47	10.65	6.95	2,300	160 00	540	287
6,600	2,800	63.34	21.00	11 00	4.66	1,714	80 00	360	288
3,800	2,900	60.86	20.00	10.85	8.29	1,400	116 00	240	289
9,900	4,650	56 00	25.80	12.00	6.20	2,500	155 00	645	290
27,100	2,900	56.00	32.00	10.84	1.16	1,666	19 00	533	291
11,080	7,680	57.24	24.00	11.08	7.68	2,857	219 00	685	292
7,960	3,640	54.86	28.57	11.37	5.20	1,076	56 00	307	293
6,480	3,520	58.34	25.00	10.80	5.86	1,875	110 00	468	294
19,000	11,000	57.14	25.72	10.86	6.28	2,108	132 00	542	295
4,020	2,420	62.67	19.45	11.16	6.72	1,440	96 00	280	296
41,500	—24,500	61.18	33.82	12.20	—7.20	1,700	—122 00	575	297
5,820	2,480	51.46	31.25	12.12	5.17	1,600	82 00	500	298
10,900	1,100	55.00	33.00	10 90	1.10	1,666	18 00	550	299
4,220	3,180	50.29	28.57	12.05	9.09	1,166	106 00	33	300
8,100	3,380	51.36	33.34	10.80	4.50	1,500	67 00	500	301
17,700	12,400	54.49	27.27	10.73	7.51	1,527	114 00	416	302
16,500	16,000	58.34	20 00	11.00	10.66	2,142	228 00	428	303
32,800	11,200	59.29	25.00	11.71	4.00	1,400	56 00	350	304
11,200	7,300	56.50	25 00	11.20	7.30	1,694	123 00	423	305
4,300	9,460	50.00	15.60	10.75	23.65	3,333	788 00	20	306
35,500	19,500	55.93	25.43	12.03	6.61	1,365	90 00	347	307
28,500	—18,500	62.22	33.34	12.66	—8.22	2,500	—205 00	833	308
10,600	5,267	54.14	30.00	10.60	5.26	1,111	58 00	333	309
7,100	8,920	63.82	11.54	10.92	13.72	3,250	446 00	375	310
3,810	2,490	67.22	15.28	10.58	6.92	2,400	166 00	366	311
17,400	—2,400	56.67	33.33	11.60	—1 60	1,500	—24 00	500	312
16,800	8,200	50.00	33.34	11.20	5.46	1,764	49 00	588	313
45,400	38,900	56.43	22.50	11.35	9.72	2,352	228 00	529	314
4,480	2,220	64.50	18 75	11.20	5.55	2,000	111 00	375	315

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
316	150	\$34,600	\$85,000	\$180,000	\$300,000	\$35,000	11.66
317	110	10,000	35,000	65,817	106,900	6,083	5.69
318	145	75,000	101,792	210,000	360,000	48,208	13.39
319	350	50,000	125,000	210,000	375,000	40,000	10.66
320	150	40,000	75,000	200,000	300,000	25,000	8.33
321	40	80,000	31,200	49,000	100,000	19,800	19.80
322	12	2,000	7,500	11,000	20,000	1,500	7.50
323	16	3,000	8,000	12,000	25,000	5,000	20.00
324	100	10,000	30,000	90,000	125,000	5,000	4.00
325	75	25,000	50,000	125,000	189,500	14,500	7.65
326	61	15,000	30,000	35,000	80,000	15,000	18.75
327	100	10,000	40,000	50,000	90,000	-	-
328	250	75,000	116,000	234,000	372,000	22,000	5.91
329	600	150,000	292,500	425,000	812,000	94,500	11.63
330	150	100,000	70,000	190,000	300,000	40,000	13.33
331	175	10,000	100,000	140,000	300,000	60,000	20.00
332	150	60,000	70,000	100,000	200,000	30,000	15.00
333	125	30,000	50,000	95,000	175,000	30,000	17.14
334	300	115,000	115,000	200,000	375,000	60,000	16.00
335	210	250,000	97,938	225,000	344,072	21,134	6.14
336	92	35,000	30,000	51,136	100,000	18,864	18.86
337	35	6,000	20,000	25,000	60,000	15,000	25.00
338	26	6,000	12,000	36,000	50,000	2,000	4.00
339	37	5,000	25,000	36,000	75,000	14,000	18.66
340	15	6,000	5,000	12,000	20,000	3,000	15.00
341	26	5,000	10,000	19,000	35,000	6,000	17.14
342	65	10,000	21,000	42,000	70,000	7,000	10.00
343	75	15,000	30,000	60,000	100,000	10,000	10.00
344	34	25,000	14,070	74,253	97,655	9,332	9.55
345	160	30,000	87,634	210,373	331,508	33,501	10.00
346	25	5,000	10,500	29,500	50,000	10,000	20.00
347	14	7,000	5,000	9,365	15,500	1,135	7.32
348	25	5,000	17,500	51,000	75,000	6,500	8.66
349	40	5,000	24,000	60,000	98,000	14,000	14.28
350	260	100,000	156,000	261,000	460,000	43,000	9.35
351	50	10,000	19,000	35,000	65,000	11,000	16.92
352	75	50,000	45,000	125,000	200,000	30,000	15.00
353	34	1,500	20,000	31,000	60,000	9,000	15.00
354	18	80,000	14,483	570,000	596,600	12,117	2.03
355	12	25,000	7,500	300,000	330,000	22,500	6.81
356	15	5,000	6,500	16,000	25,000	2,500	10.00
357	14	11,000	5,000	7,730	13,900	1,170	8.41
358	35	25,000	11,602	31,000	63,000	20,398	32.37
359	55	24,000	15,000	180,000	200,000	5,000	2.50
360	20	18,000	12,500	90,000	106,000	3,500	3.30
361	20	3,000	6,000	7,000	20,000	7,000	35.00
362	30	10,000	10,125	70,000	85,000	4,875	5.73
363	41	25,000	18,500	50,000	75,000	6,500	8.66
364	20	6,000	10,000	14,000	30,000	6,000	20.00
365	18	20,000	9,000	4,000	24,000	11,000	45.83
366	16	10,000	7,650	56,000	73,000	9,350	12.80
367	55	5,000	20,000	60,000	100,000	20,000	20.00
368	133	20,000	40,000	60,000	112,000	12,000	10.71
369	40	6,000	15,600	27,092	56,430	13,738	24.34
370	32	10,000	15,340	18,576	37,800	3,884	10.27

BOOTS AND SHOES — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$32,040	\$2,960	60.00	28.34	10.68	.98	\$2,000	\$19 00	\$566	316
11,290	—5,207	61.57	32.74	10.56	—1.487	971	—47 00	318	317
40,500	7,708	58.33	28.28	11.25	2.14	2,482	53 00	702	318
40,500	—500	56 00	33.34	10.80	—1.14	1,071	—142 00	357	319
32,400	—7,400	66.67	25.00	10.80	—2.47	2,000	—49 00	500	320
14,800	5,000	49.00	31.20	14.80	5.00	2,500	125 00	780	321
2,120	—620	55.00	37.50	10 60	—3.10	1,666	—51 00	625	322
2,680	2,320	48.00	32.00	10.72	9.28	1,562	145 00	500	323
13,100	—8,100	72.00	24.00	10.48	—6.48	1,250	—81 00	300	324
20,450	—5,950	65.96	26.30	10.79	—3.14	2,526	—79 00	666	325
8,900	6,100	43.75	37.50	11.12	7.63	1,311	100 00	491	326
9,600	—9,600	55.55	44.44	10.67	—10.66	900	—96 00	400	327
41,700	—19,700	62.91	31.18	11.20	—5.29	1,488	—78 00	464	328
90,200	4,300	52.34	36.03	11.11	.52	1,353	7 16	487	329
36,000	4,000	63.34	23.33	12.00	1.33	2,000	26 00	466	330
30,600	29,400	46.67	33.33	10.20	9.80	1,714	168 00	571	331
23,600	6,400	50.00	35.00	11.80	3.20	1,333	42 00	466	332
19,300	10,700	54.29	28.57	11.02	6.12	1,400	85 00	400	333
44,400	15,600	53.33	30.67	11.84	4.16	1,250	52 00	383	334
49,407	—28,273	65.89	28.47	14.35	—8.21	1,638	—134 00	466	335
12,100	6,764	51.14	30.00	12.10	6.76	1,086	73 00	326	336
6,360	8,640	41.67	33.33	10.60	14.40	1,714	246 00	571	337
5,360	—3,360	72.00	24.00	10.72	—6.72	1,923	—129 00	461	338
7,800	6,200	48.00	33.34	10 40	8.26	2,027	167 00	675	339
2,360	640	60.00	25.00	11.80	3.20	1,333	42 00	333	340
3,800	2,200	54 29	28.57	10.86	6.28	1,346	84 00	361	341
7,600	—600	60.00	30.00	10.85	—85	1,076	—9 23	323	342
10,900	—900	60.00	30.00	10.90	—90	1,333	—12 00	400	343
11,266	—1,934	76 04	14.41	11 53	—1.98	2,577	—56 00	413	344
34,951	—1,450	63.46	26 44	10.54	—41	2,071	—906 00	547	345
5,300	4,700	59.00	21.00	10.60	9 40	2,000	188 00	420	346
1,970	—835	60.42	32 26	12.70	—5 38	1,107	—59 00	357	347
7,800	—1,300	48.00	23.34	10 40	—1.74	3,000	—52 00	700	348
10,100	3,900	61.23	24 49	10 30	3.98	2,450	97 00	600	349
52,000	—9,000	56.74	33.91	11.31	—1.96	1,769	—34 00	600	350
7,100	3,900	53.85	29.23	10.92	6.00	1,300	78 00	380	351
23,000	7,000	62 50	22.50	11.50	3.50	2,666	93 00	600	352
6,090	2,910	51.67	33.33	10.15	4.85	1,764	85 00	588	353
64,469	—52,343	95.54	2 43	10 80	—8.77	33,144	—2,907 00	804	354
34,500	—12,000	90.91	2 28	10 45	—3.64	27,500	—1,000 00	625	355
2,800	—300	64.00	26.00	11.20	—1.20	1,667	—20 00	433	356
2,050	—880	55.61	35.98	14.74	—6.33	993	—63 00	357	357
7,800	12,598	49 21	18.42	12 38	19.99	1,800	357 00	331	358
21,440	—16,440	90.00	7 50	10.72	—8.22	3,636	—298 00	272	359
11,680	—8,180	84.91	11.79	11.01	—7.71	5,300	—409 00	625	360
2,180	4,820	35 00	30.00	10.90	24.10	1,000	241 00	300	361
9,100	—4,225	82.36	11.91	10.70	—4.97	2,833	—140 00	337	362
9,000	—2,500	66 67	24.67	12.00	—3.34	1,829	—60 00	451	363
3,360	2,640	46 67	33.33	11.20	8.80	1,500	132 00	500	364
3,600	7,400	16.67	37.50	15.00	30.83	1,333	411 00	500	365
7,900	1,450	76.72	10 48	1 98	10.82	4,562	90 00	478	366
10,300	9,700	60.00	20 00	10.30	9 70	1,818	176 00	363	367
12,400	—400	53.57	35.72	11.07	—36	842	—3 00	300	368
6,003	7,735	48 01	27.63	10.63	13.71	1,410	193 00	390	369
4,380	—496	49.15	40.58	11 58	—1.31	1,181	—15 00	479	370

In explanation of apparently excessive value of product per employe in establishments 354 and 355, and in many other instances, see consideration of tables hereinafter.

BOOTS AND SHOES — Continued.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
371	25	\$10,000	\$6,200	\$8,500	\$15,000	8300	2.00
372	22	3,500	8,000	10,000	20,000	2,000	10.00
373	50	12,000	20,800	22,930	46,000	2,270	4.93
374	43	4,000	12,400	28,704	43,160	2,056	4.76
375	100	15,000	30,000	35,000	75,000	10,000	13.33
376	300	100,000	115,000	215,000	350,000	20,000	5.71
377	30	5,000	10,860	32,400	54,000	10,740	19.88
378	240	85,000	72,487	161,800	253,275	18,988	7.49
379	60	8,500	15,000	29,437	55,000	10,563	19.20
380	17	1,000	6,150	8,988	17,640	2,502	14.18
381	33	2,500	10,400	15,497	27,000	1,103	4.08
282	12	5,000	5,200	8,175	14,414	1,039	7.20
383	305	50,000	83,868	162,323	278,568	32,383	11.63
384	100	20,000	33,264	75,980	120,000	10,756	8.96
385	75	5,000	15,000	21,084	40,000	3,916	9.79
386	40	5,000	8,480	20,076	37,800	9,244	24.45
387	30	2,500	8,400	11,647	22,651	2,604	11.19
388	18	1,500	6,320	9,072	16,818	1,456	8.64
389	150	20,000	50,000	85,560	155,000	19,440	12.54
390	53	4,700	7,080	9,721	19,656	2,855	14.52
391	45	40,000	15,000	50,000	72,000	7,000	9.72
392	40	25,000	25,000	65,000	110,000	20,000	18.18
393	40	20,000	5,000	30,000	50,000	15,000	30.00
394	50	40,000	20,000	80,225	108,675	8,450	7.77
395	123	10,000	60,677	109,550	193,495	23,263	12.02
396	14	3,000	5,200	16,000	24,000	2,800	11.66
397	38	4,000	7,000	9,000	18,000	2,000	11.11
398	367	125,000	110,000	340,000	515,000	65,000	12.62
399	61	10,000	19,000	33,712	58,125	5,413	9.31
400	276	45,000	65,000	134,328	235,000	35,677	15.18
401	75	70,000	14,000	29,700	50,000	6,300	12.60
402	30	5,000	8,000	19,740	35,000	7,250	20.74
403	80	20,000	35,000	56,250	100,000	8,750	8.75
404	20	4,000	6,000	15,000	23,000	2,000	8.69
405	22	1,500	6,587	11,068	25,396	4,741	18.66
406	263	20,000	79,000	131,550	250,000	39,450	15.78
407	200	30,000	60,000	139,700	250,000	50,300	20.12
408	64	8,000	27,600	46,000	92,000	18,400	20.00
409	20	2,500	8,320	15,738	30,000	5,942	19.80
410	70	20,000	22,000	28,000	61,135	11,135	18.21
411	50	10,000	16,000	49,000	75,000	10,000	13.33
412	40	12,000	12,000	50,000	72,000	10,000	13.88
413	18	1,500	6,000	10,230	19,600	3,370	17.19
414	44	7,000	13,000	34,000	55,000	8,000	14.54
415	75	5,000	17,600	39,000	55,000	7,400	13.45
416	64	30,000	21,312	46,612	71,500	3,576	5.00
417	25	6,300	5,000	18,000	27,725	4,725	17.04
418	105	25,000	46,000	93,960	149,800	9,840	6.56
419	125	25,000	36,000	74,000	125,000	15,000	12.00
420	52	15,000	17,000	49,000	74,500	8,500	11.40
421	16	2,500	7,000	16,500	31,200	7,700	24.67
422	25	3,500	6,000	12,300	25,000	6,700	26.80
423	175	95,000	65,000	155,000	240,000	20,000	8.33
424	42	25,000	17,500	60,000	82,200	4,700	5.71
425	27	10,000	11,000	25,000	40,250	4,250	10.55

BOOTS AND SHOES — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$2,100	—\$1,800	56.67	41.33	14.00	—12.00	\$600	—\$72.00	\$248	371
2,210	—210	50.00	40.00	11.05	—1.05	909	—9.54	363	372
5,320	—3,050	49.84	45.22	11.56	—6.62	920	—61.00	416	373
4,556	—2,500	66.51	28.73	10.55	—5.79	1,003	—58.00	288	374
8,400	—1,600	46.67	40.00	11.20	—2.13	750	—16.00	390	375
41,000	—21,000	61.43	32.86	11.71	—6.00	1,166	—70.00	383	376
5,700	5,010	60.00	20.12	10.55	9.33	1,800	168.00	362	377
30,428	—11,140	63.89	28.62	12.01	—4.52	1,055	—47.00	302	378
6,010	4,553	53.52	27.28	10.92	8.28	916	75.00	250	379
1,824	678	50.95	34.87	10.34	3.84	1,037	39.00	361	380
2,850	—1,747	57.40	38.52	10.55	—6.47	818	—52.00	315	381
1,741	—702	56.72	36.08	12.07	—4.87	1,201	—58.00	433	382
30,857	1,526	58.27	30.10	11.08	.55	913	5.00	274	383
13,200	—2,444	63.32	27.72	11.00	—2.04	1,200	—24.00	332	384
4,300	—384	52.71	37.50	10.75	—96	533	—5.12	200	385
4,080	5,164	53.11	22.44	10.79	13.66	945	129.00	212	386
2,415	189	51.42	37.09	10.66	.83	755	6.30	280	387
1,771	—319	53.85	37.51	10.53	—1.89	936	—17.00	351	388
16,700	2,740	55.20	32.26	10.77	1.77	1,033	18.00	333	389
2,248	607	49.46	36.02	11.43	3.09	370	11.00	133	390
9,600	—2,600	69.45	20.83	13.33	—3.61	1,600	—57.00	333	391
12,500	7,500	59.09	22.73	11.36	6.82	2,750	187.09	625	392
6,200	8,800	60.00	10.00	12.40	17.60	1,250	220.00	125	393
13,268	—4,818	73.82	18.41	12.20	—4.43	2,173	—96.00	400	394
19,950	3,319	56.62	31.36	10.31	1.71	1,573	26.00	493	395
2,580	220	66.67	21.67	10.75	.91	1,714	15.00	371	396
2,040	—40	50.00	38.89	11.33	—22	473	—1.05	184	397
59,000	6,000	66.02	21.36	11.45	1.17	1,403	16.00	299	398
6,413	—1,003	58.00	32.69	11.03	—1.72	998	—15.00	296	399
26,200	9,477	57.16	27.66	11.15	4.03	851	34.00	235	400
9,200	—2,900	59.40	28.00	18.40	—5.80	666	—38.00	186	401
3,800	3,460	56.40	22.86	10.85	9.89	1,166	115.00	266	402
11,200	—2,450	56.25	35.00	11.20	—2.45	1,250	—30.00	437	403
2,540	—546	63.22	26.09	11.04	—2.35	1,150	—27.00	300	404
2,630	2,111	55.40	25.94	10.35	8.31	1,154	95.00	299	405
26,200	13,250	52.62	31.60	10.18	5.30	950	50.00	300	406
26,800	23,500	55.88	24.00	10.72	9.40	1,250	117.00	390	407
9,680	8,720	50.00	30.00	10.52	9.48	1,437	136.00	431	408
3,150	2,792	52.47	27.73	10.50	9.30	1,500	139.00	416	409
7,314	3,821	45.80	35.99	11.96	6.25	873	504.00	314	410
8,100	1,900	65.31	21.33	10.80	2.53	1,500	38.00	320	411
7,920	2,080	69.45	16.67	11.00	2.88	1,800	52.00	300	412
2,050	1,320	52.20	30.61	10.45	6.74	1,088	73.00	333	413
5,920	2,080	61.82	23.64	10.76	3.78	1,250	47.00	295	414
5,800	1,600	51.55	32.00	10.55	2.90	733	21.00	234	415
8,950	—5,374	65.19	29.81	12.51	—7.51	1,117	—83.00	333	416
3,151	1,574	64.93	18.03	11.36	5.68	1,109	62.00	200	417
16,480	—6,640	62.73	30.71	11.00	—4.44	1,426	—63.00	438	418
14,000	1,003	59.20	28.80	11.20	.80	1,000	8.00	288	419
8,350	450	65.78	22.82	11.20	.20	1,432	288.00	326	420
3,270	4,430	52.89	22.44	10.18	14.19	1,950	276.00	437	421
2,710	2,990	49.20	24.00	10.81	15.96	1,000	159.00	210	422
29,700	—9,700	64.59	27.08	12.37	—4.04	1,371	—55.00	371	423
9,720	—5,070	73.00	21.29	11.82	—6.11	1,957	—119.00	416	424
4,625	—375	62.12	27.33	11.49	—94	1,490	—13.00	407	425

BOOTS AND SHOES — Concluded.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
426	28	\$15,000	\$10,193	\$39,600	\$52,032	\$2,239	4.30
427	30	5,000	14,275	41,725	60,000	4,000	6.67
428	42	10,000	12,800	46,700	66,533	7,033	10.57
429	15	2,000	6,600	11,620	20,000	2,380	11.90
430	76	12,000	40,000	80,000	125,000	5,000	4.00
431	25	16,000	11,500	35,000	53,000	6,500	12.26
432	175	30,500	36,450	123,632	173,270	13,188	7.61
433	55	30,000	35,000	90,000	150,000	25,000	16.66
434	35	5,000	6,500	15,500	23,500	1,500	6.38
435	100	50,000	50,000	150,000	225,000	25,000	11.11
436	175	20,000	50,000	150,000	230,000	30,000	13.04
437	18	2,500	11,000	20,000	45,000	14,000	31.11
438	54	7,000	18,959	32,694	61,655	10,002	16.22
439	26	20,000	11,128	19,000	33,125	2,997	9.04
440	40	20,000	13,760	32,000	50,000	4,240	8.48
441	30	7,000	7,500	20,140	31,000	3,360	10.84
442	18	1,500	5,500	7,500	14,500	1,500	10.34
443	150	25,000	100,000	250,000	370,000	20,000	5.40
444	15	2,000	5,000	6,500	15,000	3,500	23.33
445	23	6,000	5,600	13,000	24,000	5,400	22.50
446	175	20,000	50,000	150,000	230,000	30,000	13.04
447	18	2,500	11,000	20,000	45,000	14,000	31.11
448	45	4,000	7,706	15,500	25,000	1,794	7.17
449	50	8,000	9,000	30,000	50,000	11,000	22.00
450	46	4,500	8,000	14,000	24,500	2,500	10.20
451	14	40,000	6,192	17,820	45,611	21,599	47.35
452	35	20,000	15,234	81,455	106,192	9,503	8.94
453	8	1,000	5,200	20,000	28,980	3,780	13.04
454	24	3,000	6,200	20,000	30,000	3,800	12.66
455	30	3,000	7,500	42,500	55,000	5,000	9.09
456	20	5,000	5,200	6,000	18,000	6,800	37.77
457	16	2,000	6,656	2,000	12,500	3,844	30.75
458	16	2,500	11,700	11,000	33,000	10,300	31.21
459	20	3,000	10,000	6,000	25,000	9,000	36.00
460	13	6,000	7,300	8,000	19,000	3,700	19.47

BOXES.

1	11	\$11,000	\$6,000	\$14,300	\$25,000	\$4,700	18.80
2	70	25,000	29,900	42,000	90,000	18,100	20.11
3	13	8,000	5,000	20,000	33,000	8,000	24.24
4	24	5,000	6,000	12,000	20,000	2,000	10.00
5	30	55,000	13,500	61,200	85,000	10,300	12.12
6	20	15,000	8,000	25,000	40,000	7,000	17.50
7	14	10,000	6,550	20,000	30,000	3,450	11.50
8	23	15,000	11,280	13,000	28,000	3,720	13.28
9	13	8,600	5,636	7,425	16,465	3,404	20.67
10	33	1,500	10,000	35,000	60,000	15,000	25.00
11	21	20,000	7,500	16,500	30,000	6,000	20.00
12	7	6,000	5,000	20,000	30,000	5,000	16.66
13	15	4,000	7,500	9,000	18,000	1,500	8.33
14	14	1,200	5,500	12,000	25,000	7,500	30.00
15	24	5,000	8,750	10,000	30,000	11,250	37.50

BOOTS AND SHOES — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$6,103	—\$3,864	76.11	19.59	11.72	—7.42	\$1,858	—\$138 00	\$364	426
6,300	—2,300	69.54	23.79	10.50	—3.83	2,000	—76 00	475	427
7,253	—220	70.19	19.24	10.90	—3.33	1,584	—5 23	304	428
2,120	260	58.10	30.00	10.60	1.30	1,333	17 00	400	429
13,220	—8,220	64.00	32.00	10.57	—6.57	1,644	—108 00	526	430
6,260	240	66.04	21.70	11.81	.45	2,120	9 60	460	431
19,157	—5,969	71.35	21.04	11.05	—3.44	990	—34 00	208	432
16,800	8,200	60.00	23.34	11.20	5.16	2,727	149 00	636	433
2,650	—1,150	65.96	27.66	11.27	—4.89	671	—32 00	185	434
25,500	—500	66.67	22.22	11.33	—2.22	2,250	—5 00	500	435
24,200	5,800	65.22	21.74	10.52	2.52	1,314	33 00	285	436
4,650	9,350	44.45	24.45	10.33	20.78	2,500	519 00	611	437
6,586	3,416	53.03	30.75	10.68	5.54	1,141	63 00	351	438
4,513	—1,516	57.36	33.60	13.62	—4.58	1,274	—58 00	428	439
6,200	—1,960	64.00	27.52	12.40	—3.92	1,250	—49 00	344	440
3,520	—160	64.97	24.19	11.35	—5.1	1,033	—5 33	250	441
1,540	—40	51.73	37.93	10.62	—2.8	805	—2 22	305	442
38,500	—18,500	67.57	27.03	10.40	—5.00	2,466	—123 00	666	443
1,620	1,880	43.34	33.33	10.80	12.53	1,000	125 00	333	444
2,760	2,640	54.17	23.33	11.50	11.00	1,043	114 00	243	445
24,200	5,800	65.22	21.74	10.52	2.52	1,314	33 00	114	446
4,650	9,350	44.45	24.44	10.33	20.78	2,500	519 00	611	447
2,740	—946	62.00	30.83	10.96	—3.79	555	—21 00	171	448
5,480	5,520	60.00	18.00	10.96	11.04	1,000	110 00	180	449
2,720	—220	57.14	32.66	11.10	—8.0	532	—4 77	173	450
6,961	14,638	39.07	13.58	15.26	32.09	3,257	1,045 00	442	451
11,819	—2,316	76.71	14.35	11.12	—2.18	3,034	—66 00	435	452
2,958	822	69.02	17.94	10.20	2.84	3,622	102 00	650	453
3,180	620	66.67	20.67	10.60	2.06	1,250	25 00	258	454
5,680	—680	77.27	13.64	10.32	—1.23	1,833	—22 00	273	455
2,100	4,700	33.34	28.89	11.66	26.11	900	235 00	260	456
1,370	2,474	16.00	53.25	10.96	19.79	781	154 00	416	457
3,450	6,850	33.33	35.46	10.45	20.76	2,062	427 00	731	458
2,680	6,320	24.00	40.00	10.72	25.28	1,250	316 00	500	459
2,260	1,440	42.11	38.42	11.80	7.58	1,461	110 00	561	460

BOXES.

\$3,160	\$1,540	57.20	24.00	12.64	6.16	\$2,272	\$140 00	\$545	1
10,500	7,600	46.67	33.22	11.67	8.44	1,285	108 00	427	2
3,780	4,220	60.61	15.15	11.45	12.79	2,538	324 00	384	3
2,300	—300	60.00	30.00	11.50	—1.50	833	—12 00	250	4
11,800	—1,500	72 00	15.88	13.88	—1.76	2,833	—50 00	450	5
4,900	2,100	62.50	20.00	12.25	5.25	2,000	105 00	400	6
3,600	—150	66.67	21.83	12.00	—5.0	2,142	—10 00	467	7
3,700	20	46.43	40.29	13.21	.07	1,217	86	490	8
2,163	1,241	45.10	34.23	13.13	7.54	1,266	95 00	433	9
6,090	8,910	58.33	16.67	10.15	14.85	1,818	270 00	303	10
4,200	1,800	55.00	25.00	14.00	6.00	1,428	85 00	357	11
3,360	1,640	66.67	16.67	11.20	5.46	4,285	234 00	714	12
2,040	—540	50 00	41.67	11.33	—3.00	1,200	—36 00	500	13
2,572	4,928	48.00	22.00	10.29	19.71	1,785	352 00	392	14
3,300	7,950	33.33	29.17	11.00	26.50	1,250	331 00	361	15

BOXES — Concluded.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
16	14	\$5,000	\$5,000	\$10,000	\$18,500	\$3,500	18.92
17	45	10,000	17,000	27,000	50,000	6,000	12.00
18	30	2,000	15,000	2,000	25,000	8,000	32.00
19	12	1,000	7,000	20,000	35,000	8,000	22.85
20	30	50,000	10,000	30,000	50,000	10,000	20.00
21	19	3,500	5,600	6,000	14,600	3,000	20.54
22	30	2,000	9,600	12,500	25,000	2,900	11.60
23	70	4,000	15,100	30,000	50,267	5,158	10.26
24	25	3,000	7,500	9,400	18,000	1,100	6.11
25	17	3,000	7,650	21,000	36,195	7,545	20.84
26	19	2,000	5,000	4,000	10,000	1,000	10.00
27	25	3,500	5,000	5,000	12,000	2,000	16.66
28	43	1,600	10,000	10,000	25,000	5,000	20.00
29	24	3,000	6,760	3,240	13,500	3,500	25.92
30	40	6,000	10,400	15,000	35,000	9,600	27.43

BRICK.

1	31	\$20,000	\$7,500	\$5,800	\$22,400	\$9,100	40.62
2	37	35,000	12,000	11,200	25,000	1,800	7.20
3	80	10,000	14,040	32,000	48,750	2,710	5.56
4	185	375,000	30,000	60,000	92,400	2,400	2.60
5	275	375,000	27,000	79,700	133,000	26,300	19.77
6	30	2,500	7,000	7,200	16,000	1,800	11.25
7	40	25,000	10,000	6,000	25,000	9,000	36.00
8	25	5,000	6,500	3,000	10,500	1,000	9.52
9	12	6,500	5,000	1,650	12,200	5,550	45.49
10	40	75,000	8,805	4,335	19,500	6,360	32.61
11	40	5,000	8,000	4,900	13,756	856	6.22
12	60	20,000	14,441	10,800	35,000	9,759	27.88
13	40	20,000	9,000	4,620	20,000	6,380	31.90
14	22	15,000	5,000	2,750	12,000	4,250	35.41
15	35	7,000	7,350	3,665	17,500	6,485	37.05
16	60	60,000	14,350	34,000	60,000	11,650	19.41
17	14	15,000	5,889	8,439	19,720	5,392	27.34
18	30	8,000	6,000	5,000	13,500	2,500	18.51
19	20	2,000	5,000	4,000	10,000	1,000	10.00
20	59	5,000	12,000	5,000	25,000	8,000	32.00

BUILDING.

1	25	\$5,000	\$12,000	\$6,000	\$20,120	\$2,120	10.53
2	7	4,500	6,000	20,000	30,000	1,000	13.33
3	85	51,000	50,000	115,000	176,500	11,500	6.51
4	10	1,000	6,000	5,000	13,000	2,000	15.38
5	22	1,000	10,000	5,000	15,000	-	-
6	12	2,000	5,000	4,000	10,000	1,000	10.00
7	18	15,000	5,500	3,500	11,000	2,000	18.18
8	22	9,500	9,787	28,457	49,376	11,132	22.55
9	19	500	6,500	8,000	16,000	1,500	9.37
10	10	4,000	9,000	8,250	20,000	2,750	13.75

BOXES — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employé.	Average yearly net profit per employé.	Average yearly earnings of each employé.	ESTABLISHMENTS.
\$2,150	\$1,350	54.05	27.03	11.62	7.30	\$1,321	\$96 00	\$357	16
5,600	400	54.00	34.00	11.20	.80	1,111	8 88	377	17
2,620	5,380	8.09	60.00	10 18	21.52	833	179 00	500	18
3,560	4,440	57.15	20.00	10.17	12.68	2,916	370 00	583	19
8,000	2,000	60.00	20.00	16.00	4 00	1,666	66 00	333	20
1,670	1,330	41.10	38.36	11.43	9.11	768	70 00	294	21
2,620	280	50.00	38.40	10.48	1.12	833	9 33	320	22
5,267	—109	59.68	30.06	10.47	—21	718	—1 55	215	23
1,980	—880	52.22	41.67	11.00	—4.89	720	—35 00	300	24
3,800	3,745	58.02	21 11	10 19	10.35	2,129	230 00	450	25
1,120	—120	40 00	50 00	11.20	—1.20	526	—6 31	263	26
1,410	590	41.67	41 67	11.75	4 91	480	23 00	200	27
2,596	2,404	40.00	40 00	10.38	9.62	581	55 00	232	28
1,530	1,970	24.00	50.08	11.33	14 59	567	82 00	282	29
3,860	5,740	29.71	42.86	11.03	16.40	875	143 00	260	30

BRICK.

\$3,440	\$5,660	25.90	33.48	15.35	25.27	\$772	\$182 00	\$241	1
4,600	—2,800	44.80	48.00	18.40	—11.20	675	—75 00	324	2
5,475	—2,765	65.64	28.80	11.23	—5.67	609	—34 00	175	3
31,740	—29,310	64.93	32.47	34.35	—31.75	499	—158 00	162	4
35,800	—9,500	59 93	20.30	26.91	—7.14	483	—34 00	98	5
1,750	50	45 00	43 75	10.94	.31	533	1 66	233	6
4,000	5,000	24.00	40.00	16.00	20.00	625	125 00	250	7
1,350	—350	28.57	61.91	12.85	—3.33	420	—14 00	260	8
1,610	3,940	13.53	40.98	13.20	32.29	1,016	328 00	416	9
6,450	—90	22.23	45.16	33.07	—4.46	487	—2 25	220	10
1,676	—820	35.62	58.16	12.18	—5.96	343	—20 00	200	11
4,700	5,059	30.86	41.26	13.43	14.45	583	84 00	260	12
3,200	3,180	23.10	45.00	16 00	15 90	500	79 00	225	13
2,100	2,150	22 92	41.67	17.50	17.91	545	97 00	22	14
2,170	4,315	20 95	42.00	12.40	24.65	500	123 00	210	15
9,600	2,050	56.67	23.92	16.00	3.41	1,000	34 00	239	16
2,872	2,520	42.80	29.86	14.57	12.77	1,408	180 00	420	17
1,830	670	37.04	44.45	13 55	4.96	450	22 00	250	18
1,120	—120	40.00	50.00	11.20	—1 20	500	—6 00	250	19
2,800	5,200	20.00	48 00	11.20	20.80	423	88 00	203	20

BUILDING.

\$2,312	—\$192	29.82	59.65	11.49	—96	\$804	—\$7 68	\$480	1
3,270	730	66.67	20.00	10.90	2.43	4,285	104 00	857	2
20,710	—9,210	65.16	28.33	11.73	—5.22	2,076	—108 00	588	3
1,360	640	38.46	46.16	10.46	4.92	1,300	64 00	600	4
1,560	—1,560	33.33	66.67	10.50	—10 50	681	—70 00	454	5
1,120	—120	40.00	50.00	11.20	—1.20	833	—10 00	416	6
2,000	—	31.82	50.00	18.18	—	611	—	305	7
5,508	5,624	57.63	19.82	11.16	11.39	2,244	255 00	444	8
1,630	—130	50.00	40.63	10.18	—81	842	—6 84	342	9
2,240	510	41.25	45.00	11.20	2.55	2,000	51 00	900	10

BUILDING — Continued.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
11	8	\$500	\$6,000	\$5,000	\$11,800	\$800	6.77
12	60	50,000	36,000	131,300	190,500	20,200	10.60
13	10	5,000	6,000	30,000	38,000	2,000	5.26
14	67	1,000	7,500	14,000	25,000	3,500	14.00
15	11	1,250	6,000	4,000	10,500	500	4.76
16	20	5,000	5,000	12,000	18,000	1,000	5.55
17	25	3,000	8,000	20,000	50,000	22,000	44.00
18	14	4,000	5,460	5,500	12,000	1,040	8.66
19	10	10,000	5,600	23,000	33,500	4,900	14.62
20	20	10,000	13,000	20,000	36,000	3,000	8.33
21	40	10,000	15,336	60,000	82,500	7,164	8.68
22	15	1,000	5,300	20,000	27,800	2,500	8.98
23	48	30,000	20,000	65,000	110,000	25,000	22.73
24	18	30,000	7,361	14,464	30,781	8,556	29.09
25	15	5,000	5,200	45,000	56,000	5,800	10.36
26	20	30,000	6,746	17,540	26,984	2,698	10.00
27	75	30,000	33,750	118,125	168,750	16,875	10.00
28	10	2,500	5,622	14,680	22,488	2,186	9.72
29	14	1,500	5,780	880	10,000	3,340	33.40
30	50	10,000	15,310	12,000	31,000	3,690	11.90
31	50	15,000	25,740	81,500	123,240	16,000	12.98
32	24	15,000	7,200	1,950	30,000	20,850	69.50
33	25	4,000	10,000	6,000	18,000	2,000	11.11
34	30	1,000	13,120	22,412	39,480	3,948	10.00
35	10	500	6,000	18,000	25,000	1,000	4.00
36	25	2,500	8,240	1,500	12,000	2,260	18.83
37	50	10,000	25,000	35,000	65,000	5,000	7.69
38	35	5,000	23,625	53,350	85,000	8,025	9.44
39	14	5,000	8,500	22,000	35,000	4,500	12.85
40	30	15,000	9,800	75,000	95,000	10,200	10.73
41	8	500	5,500	6,500	13,000	1,000	7.69
42	8	1,500	6,000	2,650	11,750	3,100	26.38
43	12	10,000	6,500	15,000	35,000	13,500	38.57
44	20	3,000	10,000	20,000	35,000	5,000	14.29
45	20	10,000	12,000	20,000	35,000	3,000	8.57
46	12	10,000	6,200	12,000	20,000	1,800	9.00
47	12	7,000	6,000	8,200	16,500	2,300	13.93
48	16	4,700	7,717	12,000	26,308	6,591	25.05
49	10	500	6,500	16,400	24,250	1,350	5.56
50	10	1,400	5,265	17,065	24,098	1,768	7.34
51	11	1,000	7,000	20,000	29,000	2,000	6.89
52	9	1,000	6,000	10,000	18,000	2,000	11.11
53	13	6,000	7,000	10,000	21,000	4,000	19.04
54	10	40,000	7,500	48,000	60,000	4,500	7.50
55	85	10,000	35,000	30,000	75,000	10,000	13.33
56	19	30,000	11,800	25,000	44,000	7,200	16.36
57	33	22,762	12,548	40,787	54,831	1,496	2.72
58	12	2,000	7,200	30,000	39,500	2,300	5.82
59	17	3,000	5,000	20,000	27,000	2,000	7.49
60	20	3,000	12,000	40,000	60,000	8,000	13.33
61	8	2,000	5,000	8,000	15,000	2,000	13.33
62	15	2,500	6,500	10,000	20,000	3,500	17.50
63	10	1,000	5,000	40,000	70,000	25,000	35.71
64	13	500	6,500	7,100	17,000	3,400	20.00
65	50	5,000	15,000	8,500	25,000	1,500	6.00

BUILDING — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$1,210	—\$410	42.38	50.85	10.25	—3.48	\$1,475	—\$51 00	\$750	11
22,050	—1,850	70.50	18.90	11.57	—1.97	3,175	—30 00	600	12
4,100	—2,100	78.95	15.79	10.78	—5.52	3,800	—210 00	600	13
2,560	940	56.00	30.00	10.24	3.76	373	14 00	111	14
1,125	—625	38.10	57.14	10.71	—5.95	954	—56 00	545	15
2,100	—1,100	66.67	27.78	11.66	—6.11	900	—55 00	250	16
5,180	16,820	40 00	16.00	10.36	33.64	2,000	672 00	320	17
1,440	—400	45.84	45.50	12.00	—3.34	857	—28 00	390	18
3,950	950	68.66	16.72	11.79	2.83	3,350	95 00	560	19
4,200	—1,200	55.56	36.11	11.66	—3.33	1,800	—60 00	650	20
8,850	—1,686	72.73	18.59	10.72	—2.04	2,062	—42 00	382	21
2,840	—340	71.95	19.07	10.21	—1.23	1,853	—22 00	353	22
12,800	12,200	59.09	18.18	11.64	11.09	2,291	254 00	416	23
4,878	4,078	46.99	23.92	15.84	13.25	1,710	226 00	408	24
5,900	—100	80.36	9.28	10.53	—1.7	3,733	—6 66	346	25
4,498	—1,800	65.00	25.00	16.67	—6.67	1,349	—90 00	337	26
18,675	—1,800	70.00	20.00	11.06	—1.06	2,250	—15 00	450	27
2,399	—213	65.28	25.00	10.66	—1.94	2,248	—21 00	502	28
1,090	2,250	8.80	57.80	10.90	22.50	714	160 00	412	29
3,700	—10	38.71	49.39	11.93	—1.03	620	—20	306	30
13,224	2,776	66.13	20.89	10.73	2.25	2,464	55 00	514	31
3,900	16,950	6.50	24.00	13.00	56.50	1,250	706 00	300	32
2,040	—40	33.33	55.56	11.33	—1.22	720	—1 60	400	33
4,008	—60	56.77	33.23	10.15	—1.15	1,360	—2 00	437	34
2,530	—1,530	72.00	24.00	10.12	—6.12	2,500	—153 00	600	35
1,350	910	12.50	68.67	11.25	7.58	480	36 00	329	36
7,100	—2,100	53.85	38.46	10.92	—3.23	1,300	—42 00	500	37
8,800	—775	62.76	27.80	10.35	—1.91	2,428	—22 00	675	38
3,800	700	62.86	24.29	10.85	2.00	2,500	50 00	607	39
10,400	—200	78.95	10.32	10.94	—1.21	3,166	—6 66	326	40
1,330	—330	50.00	42.31	10.23	—2.54	1,625	—41 00	687	41
1,265	1,835	22.55	51.07	10.77	15.61	1,468	229 00	750	42
4,100	9,400	42.86	18.57	11.71	26.86	2,916	783 00	541	43
3,680	1,320	57.14	28.57	10.52	3.77	1,750	66 00	500	44
4,100	—1,100	57.14	34.29	11.71	—3.14	1,750	—55 00	600	45
2,600	—800	60.00	31.00	13.00	—4.00	1,666	—66 00	516	46
2,070	230	49.70	36.37	12.54	1.39	1,375	19 00	500	47
2,913	3,678	45.62	29.33	11.07	13.98	1,644	229 00	482	48
2,455	—1,105	67.63	26.81	10.12	—4.56	2,425	—110 00	650	49
2,494	—726	70.81	21.85	10.35	—3.01	2,409	—72 00	526	50
2,960	—960	68.97	24.14	10.20	—3.31	2,636	—87 00	636	51
1,860	140	55.56	33.33	10.33	.78	2,000	15 55	667	52
2,460	1,540	47.62	33.34	11.71	7.33	1,615	118 00	538	53
8,400	—3,900	80.00	12.50	14.00	—6.50	6,000	—390 00	750	54
8,100	1,900	40 00	46.67	10.80	2.53	882	22 00	411	55
6,200	1,000	56.82	26.82	14 09	2.27	2,315	52 00	621	56
6,849	—5,353	74.39	22.89	12.47	—9.75	1,661	—162 00	380	57
4,070	—1,770	75.95	18.23	10.30	—4.48	3,291	—147 00	600	58
2,880	—880	74.08	18.52	10.66	—3.26	1,588	—51 00	294	59
6,180	1,820	66.67	20.00	10.30	3.03	3,000	91 00	600	60
1,620	380	53.34	33.33	10.80	2.53	1,875	47 00	625	61
2,150	1,350	50.00	32.50	10.75	6.75	1,333	90 00	433	62
7,060	17,940	57.15	7.14	10.08	25.63	7,000	1,794 00	500	63
1,730	1,670	41.76	38.24	10.18	9.82	1,307	128 09	500	64
2,800	—1,300	34.00	60.00	11.20	—5.20	500	—26 00	300	65

BUILDING — Continued.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
66	20	\$1,500	\$7,000	\$17,000	\$25,000	\$1,000	4.00
67	27	1,000	10,650	22,000	35,000	2,350	6.71
68	41	3,000	21,479	6,550	33,016	4,987	15.10
69	12	2,000	6,240	25,000	33,470	2,230	6.66
70	21	10,000	12,480	50,000	86,125	23,615	27.45
71	53	8,000	12,000	50,000	65,000	3,000	4.62
72	18	5,000	10,000	22,000	45,000	13,000	28.88
73	16	10,000	7,800	9,600	24,000	6,600	27.50
74	37	10,000	7,250	25,000	38,000	5,750	15.13
75	25	5,000	14,000	50,000	80,000	16,000	20.00
76	20	3,000	7,500	4,000	20,000	8,500	42.50
77	10	4,000	7,500	2,000	12,000	2,500	20.83
78	8	2,000	5,000	5,000	20,000	6,000	30.00
79	12	1,000	10,000	15,000	25,000	-	-
80	20	7,000	12,500	27,000	50,000	10,500	21.00
81	16	2,000	8,000	21,000	40,000	11,000	27.50
82	14	700	6,258	6,476	13,159	425	3.22
83	10	20,000	6,500	13,000	90,000	70,500	78.33
84	15	600	7,920	8,000	18,900	2,980	15.76
85	15	3,000	10,500	10,000	22,500	2,000	8.89
86	14	5,000	7,000	4,450	12,450	1,000	8.03
87	15	4,000	6,750	1,200	9,000	1,050	11.66
88	45	2,500	7,200	4,000	15,000	3,800	25.33
89	70	200	15,500	9,350	25,830	980	3.79
90	40	8,000	9,600	50,000	76,000	16,400	21.57
91	20	500	9,600	40,000	50,000	400	.80
92	50	3,500	14,000	64,000	78,000	-	-
93	12	500	6,000	4,000	12,000	2,000	16.66
94	16	3,000	7,200	10,000	20,000	2,800	14.00
95	28	300	8,675	46,500	59,850	4,675	7.81
96	10	800	5,400	1,200	7,500	900	12.00
97	28	2,500	6,598	4,078	12,176	1,500	12.31
98	15	500	7,500	3,200	11,800	1,100	9.32
99	12	2,000	7,500	20,000	29,000	1,500	5.17
100	14	2,000	8,000	10,480	20,000	1,520	7.60
101	12	1,000	7,961	31,538	41,000	1,501	3.66
102	20	500	6,000	3,500	12,000	2,500	20.83
103	65	15,000	29,200	15,000	50,000	5,800	11.60
104	20	10,000	9,000	15,000	30,000	6,900	20.00
105	30	15,000	10,000	26,000	42,000	6,000	14.28
106	40	20,000	14,000	31,000	53,000	8,000	15.09
107	20	12,000	8,000	29,000	45,000	8,000	17.77
108	12	2,600	6,300	3,000	15,000	5,700	38.00
109	8	1,000	5,150	2,500	8,500	850	10.00
110	9	8,000	5,325	3,981	11,872	2,566	21.61
111	7	60,000	5,000	30,000	42,000	7,000	16.67
112	75	15,000	29,289	27,147	57,249	813	1.42
113	16	50,000	6,000	65,000	80,000	9,000	11.25
114	10	5,000	8,000	20,000	40,000	12,000	30.00
115	10	2,000	6,000	15,000	23,000	2,000	8.69
116	48	30,000	28,677	41,196	80,379	10,506	13.07
117	40	10,000	24,000	30,000	58,000	4,000	6.90
118	24	15,000	10,000	40,000	65,000	15,000	23.07
119	20	3,500	13,200	16,000	35,000	5,800	16.57
120	60	90,000	36,200	32,000	120,000	51,800	43.16

BUILDING — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
2,590	—21,590	68.00	28.00	10.36	—6.36	21,250	—79 00	350	66
3,560	—1,210	62.86	30.43	10.17	—3.46	1,296	—44 00	394	67
3,482	1,505	19.84	65.06	10.54	4.56	805	36 00	523	68
3,467	—1,237	74.70	18.64	10.35	—3.69	2,789	—103 00	520	69
9,213	14,432	58.06	14.49	10.70	16.75	4,101	687 00	594	70
6,980	—3,980	76.91	18.47	10.74	—6.12	1,226	—75 00	226	71
4,800	8,200	48.89	22 23	10.66	18.22	2,500	455 00	555	72
3,000	3,600	40.00	32.50	12.50	15.00	1,500	225 00	487	73
4,400	1,350	65.79	19.08	11.58	3.55	1,027	36 00	195	74
8,300	7,700	62.50	10 38	9.62	3.200	308 00	560	75	75
2,180	6,320	20.00	37.50	10.90	31.60	1,000	316 00	375	76
1,440	1,060	16.67	62.50	12.00	8.83	1,200	106 00	750	77
2,120	3,880	45.00	25 00	10.60	19.40	2,500	485 00	625	78
2,560	—2,560	60.00	40.00	10.24	—10.24	2,083	—213 00	833	79
5,420	5,080	54.00	25.00	10 84	10.16	2,500	254 00	625	80
4,120	6,880	52.50	20.00	10.30	17.30	2,500	430 00	500	81
1,358	—933	49.22	47.56	10.31	—7.09	939	—66 00	447	82
10,200	60,300	14.45	7.22	11.33	67.00	9,000	6,030 00	650	83
1,926	1,054	42.33	41.91	10 19	5.57	1,260	70 00	528	84
2,430	—430	44.44	46.67	10 80	—1.91	1,500	—28 00	700	85
1,545	—545	35.74	56.23	12.40	—4 37	889	—38 00	500	86
1,140	—90	13.34	75.00	12.66	—1.00	600	—6 00	450	87
1,650	2,150	26.67	48.00	11 00	14.33	333	47 00	160	88
2,595	—1,615	36.20	60.01	10 04	—6.25	369	—23 00	221	89
8,080	8,320	65.79	12.64	10.63	10.94	1,900	208 00	240	90
5,030	—4,630	80.00	19.20	10.06	—9.26	2,500	—231 00	480	91
8,010	—8,010	82.05	17.95	10.26	—10 26	1,560	—160 00	280	92
1,230	770	33 34	50.00	10.25	6.41	1,000	64 00	500	93
2,180	620	50.00	36.00	10.90	3.10	1,250	38 00	450	94
6,003	—1,328	77.69	14.50	10.03	—2.22	2,137	—47 00	309	95
798	102	16.00	72.00	10.64	1.36	750	10 00	540	96
1,368	132	33.50	54.19	11.23	1.08	434	4 71	235	97
1,210	—110	27.12	63.56	10.25	— 93	786	—7 33	500	98
3,020	—1,520	68.97	25.86	10.41	—5.24	2,416	—126 00	625	99
2,120	—600	52.40	40 00	10.60	—3 00	1,428	—42 00	571	100
4,160	—2,659	76.92	19.42	10 14	—6 48	3,416	—221 00	663	101
1,230	1,270	29.17	50.00	10.25	10.58	600	63 00	300	102
5,900	—100	30.00	58.40	11.80	— 20	767	—1 53	449	103
3,600	2,400	50.00	30.00	12.00	8 00	1,500	120 00	450	104
5,100	900	61.91	23.81	12.14	2.14	1,400	30 00	333	105
6,500	1,500	58.49	26.42	12 26	2.83	1,325	37 00	350	106
5,220	2,780	64.45	17.78	11.60	6.17	2,250	139 00	400	107
1,656	4,044	20.00	42.00	11 04	26.96	1,250	337 00	525	108
910	—60	29.41	60.59	10 70	— 70	1,062	—8 75	643	109
1,667	899	33.53	44.86	14.04	7.57	1,319	99 00	591	110
7,800	—800	71.43	11.90	18.57	—1.90	6,000	—114 00	714	111
6,625	—5,812	47.42	51.16	11.57	—10.15	763	—77 00	390	112
11,000	—2,000	81.25	7.50	13.75	—2.50	5,000	—125 00	375	113
4,300	7,700	50.00	20.00	10.75	19.25	4,000	770 00	800	114
2,420	—420	65.22	26.09	10.52	—1.83	2,300	—42 00	600	115
9,838	668	51.25	35.68	12.24	.83	1,674	13 00	597	116
6,400	—2,400	51.72	41.38	11.03	—4.13	1,450	—600 00	600	117
7,400	7,600	61.54	15.39	11.38	11.69	2,708	316 00	416	118
3,710	2,090	45.72	37.71	10.60	5.97	1,750	104 00	660	119
17,400	34,400	26.67	30.17	14.50	28.66	2,000	573 00	603	120

BUILDING — Continued.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit or value of product.
121	12	\$3,000	\$7,200	\$9,500	\$21,000	\$1,300	20.47
122	40	40,000	22,500	12,000	100,000	65,500	65.50
123	25	500	7,500	18,000	40,000	14,500	36.25
124	10	500	5,200	4,500	12,000	2,300	19.16
125	95	75,000	42,000	35,000	95,000	18,000	10.53
126	20	400	10,000	10,000	35,000	15,000	42.85
127	28	25,000	7,000	8,000	15,000	-	-
128	15	500	5,000	3,000	11,500	3,500	30.43
129	10	1,000	5,600	3,500	12,000	2,900	24.16
130	40	1,000	20,000	40,000	70,000	10,000	14.28
131	15	500	6,400	12,000	25,000	6,600	26.40
132	8	1,000	6,000	12,000	21,000	3,000	14.28
133	25	500	23,000	25,000	65,000	17,000	26.15
134	75	9,000	45,000	75,000	150,000	30,000	20.00
135	50	150,000	31,200	117,000	156,000	7,800	5.00
136	15	2,500	6,200	15,000	26,000	4,800	18.46
137	10	2,000	6,700	3,500	13,000	2,800	21.53
138	10	2,000	5,500	7,000	15,000	2,500	16.66
139	8	1,000	7,000	24,000	33,000	2,000	6.06
140	12	2,000	8,000	10,000	22,000	4,000	18.18
141	20	400	17,000	15,000	40,000	8,000	20.00
142	10	300	7,000	3,500	13,000	2,500	19.23
143	165	2,000	66,568	88,878	155,446	-	-
144	100	1,000	10,000	25,000	45,000	10,000	22.22
145	8	1,300	5,000	5,000	12,000	2,000	16.66
146	10	200	6,787	8,000	18,000	3,213	17.85
147	8	1,500	5,150	1,000	8,000	1,850	23.12
148	20	2,000	8,000	1,000	13,500	4,500	33.33
149	10	500	6,000	6,000	13,800	1,800	13.04
150	36	10,500	9,100	19,600	30,000	1,300	4.33
151	11	12,000	9,000	25,000	35,000	1,000	2.85
152	45	50,000	28,000	60,000	100,000	12,000	12.00
153	25	4,000	14,000	9,510	30,000	6,490	21.63
154	10	2,500	6,500	5,000	13,000	1,500	11.53
155	10	1,000	5,400	3,000	11,400	3,000	26.31
156	20	10,000	13,500	10,000	30,000	6,500	21.66
157	8	2,000	5,000	3,500	13,000	4,500	34.61
158	15	2,500	5,000	3,000	15,000	7,000	46.66
159	30	10,000	10,971	20,530	48,657	17,156	35.26
160	70	15,000	50,000	70,000	127,000	7,000	5.51
161	10	500	6,000	1,200	8,000	800	10.00
162	40	5,000	16,356	10,000	34,000	7,644	22.48
163	10	2,000	9,000	6,000	20,000	5,000	25.00
164	11	5,000	8,000	4,000	15,000	3,000	20.00
165	20	10,000	13,000	25,000	45,000	7,000	15.55
166	50	8,000	30,000	27,000	60,000	3,000	5.00
167	8	1,000	5,100	1,200	20,000	13,700	68.50
168	15	2,500	9,000	8,500	25,000	7,500	30.00
169	12	3,000	8,320	18,000	28,000	1,680	6.00
170	20	3,000	15,000	672	19,700	4,028	20.45
171	22	3,000	7,200	5,000	16,000	3,800	23.75
172	30	3,000	16,000	20,000	42,000	6,000	14.28
173	7	5,000	5,200	22,000	31,000	3,800	12.25
174	16	7,000	9,984	35,000	50,000	5,016	10.03
175	7	2,500	5,500	6,000	18,000	6,500	36.11

BUILDING — Continued.

Estimated interest and expenses.	Net profit and loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$2,280	\$2,020	45.24	34.29	10.85	9.62	\$1,750	\$168 00	\$600	121
12,400	53,100	12.00	22.50	12 40	53.10	2,500	1,327 00	562	122
4,030	10,470	45 00	18.75	10.08	26.17	1,600	418 00	300	123
1,230	1,070	37 50	43.34	10.25	8.91	1,200	107 00	520	124
14,000	4,000	36.84	44.21	14.74	4.21	1,000	42 00	442	125
3,524	11,476	28.58	28.57	10.06	32 79	1,750	573 00	500	126
3,000	—3,000	53.33	46.67	20.00	—20.00	535	—107 00	250	127
1,180	2,320	26.09	43.48	10.26	20.17	766	154 00	333	128
1,260	1,640	29.17	46.67	10 50	13.66	1,200	164 00	560	129
7,060	2,940	57.15	28.57	10.08	4.20	1,750	73 00	500	130
2,530	4,070	48.00	25.60	10 12	16.28	1,666	271 00	426	131
2,160	840	57.15	28.57	10.28	4.00	2,633	105 00	750	132
6,530	10,470	38.46	35.39	10.04	16.11	2,600	418 00	920	133
15,540	14,460	50.00	30.00	10 36	9.64	2,000	192 00	600	134
24,600	—16,800	75 00	20.00	15.76	—10 76	3,120	—336 00	624	135
2,750	2,050	57.69	23.85	10.58	7.88	1,733	136 00	413	136
1,420	1,380	26.93	51.54	10.92	10.61	1,300	138 00	670	137
1,620	880	46.67	36.67	10.80	5.86	1,500	88 00	550	138
3,360	—1,360	72.73	21.21	10.18	—4.12	4,125	—170 00	875	139
2,320	1,680	45.46	36.36	10.54	7.64	1,833	140 00	666	140
4,024	3,976	37.50	42.50	10.06	9.94	2,000	198 00	850	141
1,318	1,182	26.92	53 85	10.14	9 09	1,300	118 00	700	142
15,665	—15,665	57.18	42 82	10.07	—10.07	912	—94 00	403	143
4,560	5,440	55.56	22.22	10.13	12.09	450	54 00	100	144
1,278	722	41.67	41.67	10.65	6.01	1,500	90 00	625	145
1,812	1,401	44.44	37.71	10 07	7.78	1,800	140 00	679	146
890	960	12.50	64.38	11.12	12.00	1,000	120 00	643	147
1,470	3,030	7.41	59.26	10 89	22.44	675	151 00	400	148
1,410	390	43.48	43.48	10.22	2.82	1,380	39 00	600	149
3,630	—2,330	65.34	30.33	12.10	—7.77	833	—64 00	252	150
4,220	—3,220	71.43	25.72	12.05	—9.20	3,181	—292 00	818	151
13,000	—1,000	60.00	28.00	13.00	—1.00	2,222	—22 00	622	152
3,240	3,250	31.70	46.67	10.80	10.83	1,200	130 00	560	153
1,450	50	38.47	50.00	11.15	.38	1,300	5 00	650	154
1,200	1,800	26.32	47.37	10.52	15.79	1,140	180 00	540	155
3,600	2,900	33.34	45.00	12.00	9 66	1,500	145 00	675	156
1,420	3,080	26.93	38.46	10.92	23.69	1,625	383 00	625	157
1,650	5,350	20 00	33.34	11.00	35.66	1,000	356 00	332	158
5,466	11,690	42.19	22.55	11.23	24.03	1,621	389 00	365	159
13,600	—6,600	55.12	39 37	10.70	—5.19	1,814	—94 00	714	160
830	—30	15.00	75.00	10.37	—37	800	—3 00	600	161
3,700	3,944	29.41	48.11	10.88	11.60	850	98 00	408	162
2,120	2,880	30.00	45.00	10.60	14.40	2,000	288 00	900	163
1,800	1,200	26.67	53.33	12 00	8.00	1,363	109 00	727	164
5,100	1,900	55.56	28.89	11.33	4.22	2,250	95 00	650	165
6,480	—3,480	45.00	50 00	10.80	—5 80	1,200	—69 00	600	166
2,060	11,640	6.00	25.50	10.30	58.20	2,500	1,455 00	637	167
2,650	4,850	34.00	36.00	10.60	19.40	1,666	323 00	600	168
2,980	—1,300	64.29	29.71	10.64	—4.64	2,333	—108 00	693	169
2,150	1,878	3.41	76.14	10.91	9.54	985	93 00	750	170
1,780	2,020	31.25	45.00	11.12	12 63	727	91 00	327	171
4,380	1,620	47.62	38.10	10.42	3.86	1,400	54 00	533	172
3,400	400	70.97	16.78	10.96	1 29	4,428	57 00	742	173
5,420	—404	70.00	19.97	10.84	—81	3,125	—25 00	624	174
1,950	4,550	33.33	30.56	10.83	25.28	2,571	650 00	785	175

BUILDING — Continued.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
176	18	\$9,000	\$12,000	\$9,000	\$31,000	\$13,000	38.23
177	12	5,000	8,000	7,000	20,000	5,000	25.00
178	10	8,000	7,500	3,000	15,000	4,500	30.00
179	10	20,000	5,537	3,916	15,858	6,405	40.39
180	20	5,000	9,990	13,000	27,000	4,010	14.85
181	7	5,000	5,200	15,000	25,000	4,800	19.20
182	9	5,000	5,200	2,500	10,000	2,300	23.00
183	12	3,000	5,000	2,400	10,000	2,600	26.00
184	10	1,000	6,500	7,000	17,000	3,500	20.58
185	30	12,000	15,000	20,000	40,000	5,000	12.50
186	24	2,000	7,200	25,000	36,000	3,800	10.55
187	7	7,000	5,000	10,000	20,000	5,000	25.00
188	8	4,000	5,000	15,000	25,000	5,000	20.00
189	9	1,000	5,000	6,500	15,000	3,500	23.33
190	7	2,000	5,000	6,000	13,000	2,000	15.38
191	30	10,000	10,000	40,000	60,000	10,000	16.66
192	15	1,000	10,000	17,000	30,000	3,000	10.00
193	24	10,000	15,000	17,000	35,000	3,000	8.57
194	12	5,000	8,000	30,000	45,000	7,000	15.55
195	6	13,000	5,000	20,000	30,000	5,000	16.66
196	22	6,000	14,000	30,000	50,000	6,000	12.00
197	35	40,000	18,600	75,000	125,000	31,400	25.12
198	15	1,000	6,750	2,000	10,000	1,250	12.50
199	25	8,000	15,600	15,720	55,000	23,680	43.05
200	10	1,000	8,000	14,000	25,000	3,000	12.00
201	25	3,000	6,500	1,700	9,400	1,200	12.76
202	20	4,000	12,000	25,000	53,000	16,000	30.19
203	16	1,500	9,000	19,500	29,700	1,200	4.04
204	8	5,000	7,000	15,000	25,000	3,000	12.00
205	12	5,000	8,000	13,000	25,000	4,000	16.00
206	15	6,000	12,000	18,000	35,000	5,000	14.28
207	12	4,000	8,000	17,000	30,000	5,000	16.66
208	15	5,000	8,000	25,000	35,000	2,000	5.71
209	30	10,000	18,300	110,000	150,000	21,700	14.46
210	20	10,000	12,000	35,000	50,000	3,000	6.00
211	21	15,000	12,000	22,000	36,000	2,000	5.55
212	16	1,600	8,000	25,000	45,000	12,000	26.66
213	10	5,000	7,000	20,000	40,000	13,000	32.50
214	10	1,000	6,200	10,000	20,000	3,800	19.00
215	40	5,000	12,000	13,728	30,000	4,272	14.24
216	15	6,000	11,900	16,000	39,000	11,100	28.45
217	15	6,000	9,150	12,000	25,000	3,850	15.40
218	23	7,000	10,033	8,200	22,000	3,767	17.12
219	16	6,000	9,300	4,200	15,000	1,500	10.00
220	10	2,000	6,500	5,500	14,000	2,000	14.28
221	12	1,000	6,200	27,000	35,000	1,800	5.15
222	30	10,000	12,000	10,000	35,000	13,000	37.14
223	12	1,500	7,500	1,500	12,000	3,000	25.00
224	10	3,000	5,000	2,000	8,000	1,000	12.50
225	20	500	14,040	15,000	35,000	5,960	17.02
226	11	10,000	5,232	7,771	16,788	3,785	22.54
227	24	2,000	12,500	20,000	45,000	12,500	27.77
228	75	1,000	43,500	55,000	108,000	9,500	8.79
229	12	2,000	10,500	6,500	20,300	3,300	16.25
230	8	2,000	6,200	5,500	14,000	2,300	16.42

BUILDING — Continued.

Estimated terest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of inter- est and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly pro- duct per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$3,940	\$9,060	26.47	35.30	11.58	26.65	\$1,888	\$503 00	\$666	176
2,300	2,700	35.00	40.00	11.50	13.50	1,666	225 00	666	177
1,980	2,520	20.00	50.00	13.20	16 80	1,500	252 00	750	178
2,786	3,619	24.69	34 92	17.56	22.83	1,585	361 00	553	179
3,000	1,010	48.15	37.00	11.11	3.74	1,350	50 00	499	180
2,800	2,000	60.00	20.80	11.20	8.00	3,571	285 00	742	181
1,300	1,000	25 00	52.00	13.00	10.00	1,111	111 00	477	182
1,180	1,420	24.00	50.00	11 80	14 20	833	118 00	416	183
1,760	1,740	41.18	38.24	10 35	10 23	1,700	174 00	650	184
4,720	280	50.00	37.50	11.80	.70	1,333	9 33	500	185
3,720	80	69.45	20.00	10 33	.22	1,500	3 33	300	186
2,420	2,580	50.00	25.00	12 10	12 90	2,857	368 00	714	187
2,740	2,260	60.00	20.00	10.96	9.04	3,125	282 00	625	188
1,560	1,940	43.33	33.34	10.40	12.93	1,666	215 00	555	189
1,420	580	46.16	38.46	10.92	4.46	1,857	82 00	714	190
6,600	3,400	66 67	16.67	11.00	5 66	2,000	113 00	333	191
3,060	—60	56.67	33.33	10.20	— 20	2,000	—4 00	666	192
4,100	—1,100	48.57	42.86	11.71	—3.14	1,458	—45 00	625	193
4,800	2,200	66.67	17.78	10.66	4.89	3,750	183 00	666	194
3,780	1,220	66.67	16.67	12.60	4.06	5,000	203 00	833	195
5,360	640	60.00	28.00	10.72	1.28	2,272	29 00	636	196
14,900	16,500	60.00	14.88	11.92	13.20	3,571	471 00	531	197
1,060	190	20 00	67.50	10.60	1.90	666	12 00	450	198
5,980	17,700	28.58	28.37	10.87	32.18	2,200	708 00	624	199
2,560	440	56.00	32.00	10 24	1.76	2,500	44 00	800	200
1,120	80	18.09	69.15	11.91	.85	376	3 20	260	201
5,540	10,460	47.17	22.64	10 45	19.74	2,650	523 00	600	202
3,060	—1,860	65.66	30.30	10 30	—6.26	1,856	—116 00	562	203
2,800	200	60.00	28.00	11 20	.80	3,125	25 00	875	204
2,800	1,200	52.00	32.00	11.20	4.80	2,083	100 00	666	205
3,860	1,140	51.43	34.29	11.02	3.26	2,333	76 00	800	206
3,240	1,760	56.67	26.67	10.80	5.86	2,500	146 00	666	207
3,800	—1,800	71.43	22.86	10.85	—5.14	2,333	—120 00	533	208
15,600	6,100	73.34	12.20	10.40	4.06	5,000	203 00	610	209
5,600	—2,600	70.00	24.00	11.20	—5.20	2,500	—130 00	600	210
4,500	—2,500	61.11	33.34	11.50	—6.95	1,714	119 00	571	211
4,596	7,404	55.56	17.78	10.21	16.45	2,813	463 00	500	212
4,300	8,700	50.00	17.50	10.75	21.75	4,000	870 00	700	213
2,060	1,740	50.00	31.00	10 30	8.70	2,000	174 00	620	214
3,300	972	45.76	40.00	11.00	3.24	750	24 00	300	215
4,260	6,840	41.03	30 52	10.92	17.53	2,600	456 00	793	216
2,860	990	48.00	36.60	11.44	3.96	1,666	66 00	610	217
2,620	1,147	37.27	45.61	11.90	5 22	956	45 00	436	218
1,860	—360	28.00	62.00	12.40	2.40	938	—23 00	581	219
1,520	480	39.29	46.43	10.85	3.43	1,400	48 00	650	220
3,560	—1,760	77.14	17.71	10.17	—5.02	2,917	—147 00	517	221
4,100	8,900	28.57	34.29	11.71	25.43	1,166	296 00	400	222
1,290	1,710	12.50	62.50	10.75	14.25	1,000	142 00	625	223
980	20	25 00	62 50	12 25	.25	800	2 00	500	224
3,530	2,430	42.86	40.12	10.08	6.94	1,750	121 00	702	225
2,279	1,506	46.29	31.17	13.57	8.97	1,526	136 00	475	226
4,620	7,880	44.45	27.78	10.26	17.51	1,875	303 00	520	227
10,860	—1,360	50.93	40.28	10.05	—1.26	1,440	—18 00	580	228
2,150	1,150	32.02	51 73	10.59	5.66	1,691	95 00	875	229
1,520	780	39.29	44.29	10.85	5 57	1,750	97 00	775	230

BUILDING — Concluded.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
231	16	\$5,000	\$11,000	\$15,000	\$30,000	\$4,000	13.33
232	75	25,000	36,400	45,000	100,000	18,600	18.60
233	100	40,000	30,000	40,000	100,000	30,000	30.00
234	10	4,000	8,000	5,000	20,000	7,000	35.00
235	16	8,000	12,000	40,000	64,000	12,000	18.75
236	186	10,000	32,820	6,000	45,000	6,180	13.73
237	20	1,000	7,000	5,000	20,000	8,000	40.00
238	8	300	5,000	1,500	8,000	1,500	18.75
239	10	2,000	5,000	1,000	8,000	2,000	25.00
240	15	10,000	9,500	12,000	20,000	—1,500	—7.50

CARRIAGES AND WAGONS.

1	10	\$5,000	\$6,000	\$7,000	\$16,000	\$3,000	18.75
2	7	15,000	5,000	2,000	8,000	1,000	12.50
3	25	45,000	13,000	10,000	25,000	2,000	8.00
4	10	18,000	7,233	5,171	17,116	4,712	27.53
5	8	2,000	5,500	6,250	13,550	1,800	13.29
6	6	5,000	5,000	2,500	8,500	1,000	11.76
7	12	6,000	6,330	6,271	18,386	5,785	31.46
8	8	5,000	5,200	1,200	10,000	3,600	36.00
9	30	18,000	17,000	30,000	50,000	3,000	6.00
10	10	3,000	7,000	14,000	20,000	—1,000	—5.00
11	10	7,000	5,000	5,000	13,000	3,000	23.08
12	15	25,000	13,750	5,000	25,000	6,250	25.00
13	16	7,000	8,800	6,308	20,000	4,892	24.46
14	52	10,000	23,660	32,775	71,085	14,650	20.61
15	12	17,000	5,325	3,256	11,044	2,463	22.30
16	20	15,000	10,000	27,000	40,000	3,000	7.50
17	20	10,000	7,000	28,000	36,000	1,000	2.77
18	50	30,000	21,000	75,000	100,000	4,000	4.00
19	20	25,000	13,200	31,800	50,000	5,000	10.00
20	20	30,000	10,000	24,000	36,000	2,000	5.55
21	12	5,000	5,000	6,000	12,000	1,000	8.33
22	12	5,000	6,400	15,000	30,000	8,600	28.67
23	25	30,000	15,000	25,000	45,000	5,000	11.11
24	20	25,000	12,000	20,000	40,000	8,000	20.00
25	8	4,000	5,200	2,500	8,600	900	10.46
26	8	4,000	5,000	2,500	10,000	2,500	25.00
27	12	5,000	5,000	4,000	12,000	3,000	25.00
28	10	550	6,354	1,686	8,873	833	9.38
29	20	20,000	12,500	35,000	50,000	2,500	5.00
30	12	8,000	6,500	5,000	15,000	3,500	23.33
31	8	4,000	5,000	10,000	25,000	10,000	40.00
32	20	80,000	10,000	10,000	30,000	10,000	33.33
33	34	40,000	15,000	25,000	50,000	10,000	20.00
34	40	20,000	12,000	40,000	60,000	8,000	13.33
35	18	10,000	7,500	15,000	25,000	2,500	10.00
36	13	8,000	6,760	7,000	17,000	3,240	19.05
37	30	10,000	9,000	16,000	35,000	10,000	28.57
38	35	40,250	20,103	32,975	65,000	11,922	18.34
39	20	10,000	12,000	10,000	25,000	3,000	12.00
40	20	30,000	10,000	25,000	40,000	5,000	12.50

BUILDING — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$3,300	\$700	50.00	36.67	11.00	2.33	\$1,875	\$43 00	\$687	231
11,500	7,100	45.00	36.40	11.50	7.10	1,333	94 00	485	232
12,400	17,600	40.00	30.00	12.40	17.60	1,000	176 00	300	233
2,240	4,760	25.00	40.00	11.20	23.80	2,000	476 00	800	234
6,880	5,120	62.50	18.75	10.75	8.00	4,000	320 00	750	235
5,100	1,080	13.34	72.93	11.33	2.40	241	5 80	176	236
2,060	5,940	25.00	35.00	10.30	29.70	1,000	297 00	350	237
818	682	18.75	62.50	10.22	8.53	1,000	85 00	625	238
920	1,080	12.50	62.50	11.50	13.50	800	108 00	500	239
2,600	—4,100	60.00	47.50	13.00	—20.50	1,333	—273 00	633	240

CARRIAGES AND WAGONS.

\$1,900	\$1,100	43.75	37.50	11.87	6.88	\$1,600	\$110 00	\$600	1
1,700	—700	25.00	62.50	21.25	—8.75	1,142	—100 00	714	2
5,200	—3,200	40.00	52.00	20.80	—12.80	1,000	—128 00	520	3
2,792	1,920	30.21	42.26	16.32	11.21	1,711	192 00	723	4
1,475	325	46.12	40.59	10.89	2.40	1,693	40 00	687	5
1,150	—150	29.41	58.83	13.52	—1.76	1,416	—25 00	833	6
2,199	3,586	34.11	34.43	11.96	19.50	1,532	298 00	527	7
1,300	2,300	12.00	52.00	13.00	23.00	1,250	287 00	650	8
6,080	—3,080	34.00	60.00	12.16	—6.16	1,666	—102 00	566	9
2,180	—3,180	70.00	35.00	10.90	—15.90	2,000	—318 00	700	10
1,720	1,280	38.46	38.46	13.23	9.85	1,300	128 00	500	11
4,000	2,250	20.00	55.00	16.00	9.00	1,666	150 00	916	12
2,420	2,472	31.54	44.00	12.10	12.36	1,250	154 00	550	13
7,709	6,941	46.11	33.28	10.85	9.76	1,367	133 00	455	14
2,124	339	29.48	48.22	19.23	3.07	920	28 00	443	15
4,900	—1,900	67.50	25.00	12.25	—4.75	2,000	—95 00	500	16
4,200	—3,200	77.78	19.45	11.66	—8.89	1,800	—160 00	350	17
11,800	—7,800	75.00	21.00	11.80	—7.80	2,000	—156 00	420	18
6,500	—1,500	63.60	26.40	13.00	—3.00	2,500	—75 00	660	19
5,400	—3,400	66.67	27.78	15.00	—9.45	1,800	—170 00	500	20
1,500	—500	50.00	41.67	12.50	—4.17	1,000	—41 00	416	21
3,300	5,300	50.00	21.33	11.00	17.67	2,500	441 00	533	22
6,300	—1,300	55.56	33.33	14.00	—2.89	1,800	—52 00	606	23
5,500	2,500	50.00	30.00	13.75	6.25	1,666	104 00	500	24
1,100	—200	29.07	60.47	12.79	—2.33	1,075	—25 00	650	25
1,240	1,260	25.00	50.00	12.40	12.60	1,250	157 00	625	26
1,500	1,500	33.33	41.67	12.50	12.50	1,000	125 00	416	27
920	—87	19.01	71.61	10.37	—9.9	887	—8 70	635	28
6,200	—3,700	70.00	25.00	12.40	—7.40	2,500	—185 00	625	29
1,980	1,520	33.34	43.33	13.20	10.13	1,250	126 00	541	30
2,740	7,260	40.00	20.00	10.96	29.04	3,125	907 00	625	31
7,800	2,200	33.34	33.33	26.00	7.33	1,500	110 00	500	32
7,400	2,600	50.00	30.00	14.80	5.20	1,470	76 00	441	33
7,200	800	66.67	20.00	12.00	1.33	1,500	20 00	300	34
3,100	—600	60.00	30.00	12.40	—2.40	1,388	—33 00	416	35
2,180	1,060	41.18	39.77	12.82	6.23	1,307	79 00	520	36
4,100	5,900	45.72	25.71	11.71	16.86	1,166	196 00	300	37
8,915	3,007	50.73	30.93	13.71	4.63	1,857	85 00	574	38
3,100	—100	40.00	48.00	12.40	—4.0	1,250	—5 00	600	39
5,800	—800	62.50	25.00	14.50	—2.00	2,000	—40 00	500	40

CARRIAGES AND WAGONS — Concluded.

ESTABLISHMENTS.	Average number of employ'cs.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
41	8	\$12,000	\$5,600	\$7,000	\$16,000	\$3,400	21.25
42	9	5,000	6,000	9,000	16,500	1,500	9.09
43	18	6,000	6,000	10,000	20,000	4,000	20.00
44	22	10,000	15,000	25,000	50,000	10,000	20.00
45	22	20,000	8,000	10,000	22,000	4,000	18.18
46	29	20,000	10,000	18,000	35,000	7,000	20.00
47	12	20,000	7,000	5,000	28,000	16,000	57.14
48	14	7,000	6,500	4,000	12,000	1,500	12.50
49	45	25,000	25,000	40,000	75,000	10,000	13.33
50	25	6,000	10,000	16,000	42,000	16,000	38.09
51	22	20,000	13,000	30,000	60,000	17,000	28.33
52	8	6,000	6,000	11,000	19,000	2,000	10.53
53	14	20,000	10,000	25,000	40,000	5,000	12.50
54	45	30,000	25,000	87,000	130,000	18,000	13.84
55	15	12,000	6,000	29,000	40,000	5,000	12.50
56	20	4,000	8,500	19,500	30,000	2,000	6.67
57	27	25,000	10,000	40,000	53,000	3,000	5.66
58	100	40,000	30,000	125,000	175,000	20,000	11.42
59	10	8,000	6,000	20,000	30,000	4,000	13.33
60	25	11,000	12,000	32,000	49,000	5,000	10.20
61	20	8,000	8,000	25,000	40,000	7,000	17.50
62	25	25,000	14,400	34,300	52,000	3,300	6.35
63	20	5,000	9,000	25,000	39,000	5,000	12.82
64	15	10,000	9,600	24,400	36,000	2,000	5.55
65	22	15,000	5,000	12,000	23,000	6,000	26.08
66	60	75,000	35,000	50,000	100,000	15,000	15.00
67	25	10,000	8,326	11,396	23,086	3,364	14.57
68	15	2,500	6,240	6,000	13,250	1,010	7.62
69	40	25,000	14,000	13,000	30,000	3,000	10.00
70	18	5,000	8,000	5,000	17,000	4,000	23.52
71	10	11,000	7,975	8,000	19,000	3,025	15.92
72	18	20,000	10,000	8,000	25,000	7,000	28.00
73	12	3,500	7,200	10,800	24,880	6,880	27.65
74	20	25,000	8,000	15,000	27,000	4,000	14.81
75	8	6,700	6,500	5,633	14,000	1,867	13.34
76	22	30,000	12,700	11,500	26,000	1,800	6.92
77	30	1,000	12,500	15,000	45,000	17,500	38.88
78	9	1,500	7,382	10,316	18,987	1,289	6.79
79	20	10,000	10,000	8,000	25,000	7,000	28.00
80	12	7,000	11,000	8,000	25,000	6,000	24.00
81	30	150,000	20,000	30,000	75,000	25,000	33.33
82	28	51,000	17,023	14,000	43,119	12,096	28.05
83	105	40,000	35,000	90,000	140,000	15,000	10.71
84	14	5,000	7,643	4,743	14,779	2,393	16.19
85	38	18,000	18,000	7,500	34,500	9,000	26.08
86	12	34,000	8,700	50,000	72,000	13,300	18.47
87	12	1,500	5,000	3,600	10,000	1,400	14.00
88	21	4,000	14,000	5,000	26,000	7,000	26.92
89	35	15,000	25,000	35,000	75,000	15,000	20.00
90	18	5,000	8,000	18,000	30,000	4,000	13.33

CARRIAGES AND WAGONS — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$2,320	\$1,080	43.75	35.00	14.50	6.75	\$2,000	\$135 00	\$700	41
1,950	—450	54.54	36.37	11.81	—2.72	1,833	—50 00	666	42
2,360	1,640	50.00	30.00	11.80	8.20	1,111	91 00	333	43
5,600	4,400	50.00	30.00	11.20	8.80	2,272	200 00	681	44
3,400	600	45.46	36.36	15.45	2.73	1,000	27 00	363	45
4,700	2,300	51.43	28.57	13.43	6.57	1,206	79 00	344	46
4,000	12,000	17.86	25.00	14.28	42.86	3,333	1,000 00	583	47
1,620	—120	33.33	54.17	13.50	—1.00	857	—8 57	464	48
9,000	1,000	53.34	33.33	12.00	1.33	1,666	22 00	555	49
4,560	11,440	38.10	23.81	10.85	27.24	1,680	457 00	400	50
7,200	9,800	50.00	21.67	12.00	16.33	2,727	445 00	590	51
2,260	—260	57.89	31.58	11.89	—1.36	2,375	—32 00	750	52
5,200	—200	62.50	25.00	13.00	—50	2,857	—14 00	714	53
14,800	3,200	66.93	19.23	11.38	2.46	2,888	71 00	222	54
4,720	280	72.50	15.00	11.80	.70	2,666	18 00	400	55
3,240	—1,240	65.00	28.33	10.80	—4.13	1,500	—62 00	425	56
6,800	—3,800	75.47	18.87	12.83	—7.17	1,962	—140 00	370	57
19,900	100	71.43	17.15	11.37	.05	1,750	1 00	300	58
3,480	520	66.67	20.00	11.60	1.73	3,000	52 00	600	59
5,560	—560	65.31	24.49	11.34	—1.14	1,960	—22 00	480	60
4,480	2,520	62.50	20.00	11.20	6.30	2,000	126 00	400	61
6,700	—3,400	65.96	27.69	12.88	—6.53	2,080	—136 00	576	62
4,200	800	64.10	23.08	10.77	2.05	1,950	40 00	450	63
4,200	—2,200	67.78	26.67	11.66	—6.11	240	—146 00	640	64
3,200	2,800	52.18	21.74	13.91	12.17	1,045	127 00	227	65
14,500	500	50.00	35.00	14.50	.50	1,666	8 33	583	66
2,909	455	49.36	36.07	12.60	1.97	923	18 00	333	67
1,475	—465	45.28	47.10	11.13	—3.51	883	—31 00	416	68
4,500	—1,500	43.33	46.67	15.00	—5.00	750	—37 00	350	69
2,000	2,000	29.42	47.06	11.76	11.76	944	111 00	444	70
2,560	465	42.10	41.98	13.47	2.45	1,900	46 00	797	71
3,700	3,300	32.00	40.00	14.80	13.20	1,388	183 00	555	72
2,698	4,182	43.41	28.94	10.84	16.81	2,073	348 00	600	73
4,200	—200	55.56	29.63	15.55	—74	1,350	—10 00	400	74
1,802	65	40.24	46.42	12.87	.47	1,750	8 12	812	75
4,400	—2,600	44.23	48.85	16.92	—10.00	1,181	—118 00	577	76
4,560	12,940	33.34	27.78	10.13	28.75	1,500	431 00	416	77
1,989	—700	54.33	38.88	10.47	—3.68	2,109	—77 00	820	78
3,100	3,900	32.00	40.00	12.40	15.60	1,250	195 00	500	79
2,920	3,080	32.00	44.00	11.68	12.32	2,083	256 00	916	80
16,500	8,500	40.00	26.67	22.00	11.33	2,733	283 00	666	81
7,372	4,724	32.47	39.48	17.09	10.96	1,539	168 00	607	82
16,400	—1,400	64.28	25.01	11.71	—1.00	1,333	—13 00	333	83
1,778	615	32.09	51.72	12.03	4.16	1,055	43 00	545	84
4,530	4,470	21.74	51.18	13.13	12.95	907	117 00	473	85
9,240	4,060	69.45	12.08	12.83	5.64	6,000	338 00	725	86
1,090	310	36.00	50.00	10.90	3.10	833	25 00	416	87
2,840	4,160	19.23	53.85	10.92	16.00	1,238	198 00	666	88
8,400	6,600	46.67	33.33	11.20	8.80	2,142	188 00	714	89
3,300	700	60.00	26.67	11.00	2.33	1,666	38 00	444	90

CLOTHING.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
1	43	\$8,000	\$5,490	\$6,360	\$13,035	\$1,185	9.09
2	169	40,000	17,500	15,000	72,500	40,000	55.17
3	36	125,000	14,200	328,532	361,385	18,653	5.16
4	256	25,000	23,000	153,000	322,500	146,500	45.42
5	31	3,000	5,000	3,000	9,000	1,000	11.11
6	100	50,000	20,000	125,000	175,000	30,000	17.14
7	149	125,000	29,784	80,000	186,357	76,573	41.08
8	295	198,000	79,429	128,438	214,003	6,136	2.86
9	24	13,000	7,000	13,225	30,000	9,775	32.58
10	21	1,000	5,000	17,500	30,000	7,500	25.00
11	43	10,000	6,500	35,000	45,000	3,500	7.77
12	60	10,000	17,500	45,000	65,500	3,000	4.58
13	36	15,000	10,000	4,693	20,000	5,307	26.53
14	88	8,824	15,196	52,149	85,410	18,065	21.15
15	30	2,500	5,463	21,408	35,000	8,129	23.22
16	110	12,000	16,600	27,780	48,000	3,620	7.51
17	36	4,500	5,162	12,780	25,000	7,058	28.23
18	90	20,000	19,500	26,800	60,000	13,700	22.83
19	22	8,500	6,600	15,000	25,000	3,400	13.60
20	195	100,000	80,000	160,000	363,879	123,879	34.04
21	36	14,000	11,000	34,000	50,000	5,000	10.00
22	23	7,000	8,400	11,000	23,000	3,600	15.65
23	19	4,000	5,600	8,000	17,000	3,100	20.00
24	80	50,000	38,221	106,986	150,000	4,793	3.19
25	91	41,500	31,388	41,016	80,162	7,758	9.67
26	341	211,000	115,078	161,374	355,150	78,698	22.16
27	84	30,000	28,000	62,000	100,000	10,000	10.00
28	142	75,000	50,000	101,000	200,000	49,000	24.50
29	214	50,000	65,000	185,300	260,000	9,700	3.73
30	25	6,000	6,000	17,000	25,000	2,000	8.00
31	143	150,000	44,000	153,000	250,000	53,000	21.20
32	6	10,000	5,000	6,000	15,000	4,000	26.67
33	37	20,000	9,000	24,000	40,000	7,000	17.50
34	13	4,000	5,000	7,000	15,000	3,000	20.00
35	10	3,000	7,200	7,500	20,000	5,300	26.50
36	50	15,000	25,000	39,800	69,450	4,650	6.69
37	20	4,000	10,000	15,000	30,000	5,000	16.67
38	19	60,000	9,633	180,118	198,451	8,700	4.38
39	20	60,000	15,000	80,000	104,000	9,000	8.65
40	60	75,000	20,000	40,000	90,000	30,000	33.33
41	90	5,000	20,000	40,000	80,000	20,000	25.00
42	30	150,000	14,493	42,772	74,903	17,638	23.55
43	26	500	10,400	500	14,000	3,300	23.57
44	20	300	5,200	100	6,760	1,460	21.59
45	20	4,000	7,000	6,500	15,000	1,500	10.00
46	40	200	6,760	150	8,220	1,310	15.93
47	54	8,000	10,000	24,000	41,600	7,600	18.27
48	41	1,000	20,800	500	23,000	1,700	7.39
49	30	500	9,100	210	11,700	2,360	20.17
50	35	600	13,000	500	15,600	2,100	13.46
51	20	100	7,200	100	15,000	7,700	51.33
52	32	15,000	6,000	50,000	90,000	34,000	37.77
53	250	110,000	77,850	146,429	252,313	28,034	11.12
54	52	10,000	8,000	18,000	35,000	9,000	25.71
55	25	500	11,700	300	14,000	2,000	14.29

CLOTHING.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$1,784	—\$599	48.79	42.12	13.68	—4.59	\$303	—\$13 00	127	1
9,650	30,350	20.69	24.14	13.31	41.86	453	189 00	109	2
43,639	—24,986	90.91	3.93	12.07	—6.91	10,038	—694 00	394	3
33,750	112,750	47.44	7.13	10.47	34.96	1,259	440 00	89	4
1,080	—80	33.33	55.56	12.00	—89	290	—2 58	161	5
20,500	9,500	71.43	11.43	11.71	5.43	1,750	95 00	200	6
26,136	50,437	42.93	15.99	14.02	27.06	1,250	338 00	199	7
33,280	—27,144	60.02	37.12	15.55	—12.69	725	—92 00	269	8
3,780	5,995	41.09	23.33	12.60	19.98	1,250	249 00	291	9
3,060	4,440	58.33	16.67	10.20	14.80	1,428	211 00	238	10
5,100	—1,600	77.78	14.45	11.33	—3.56	1,046	—37 00	151	11
7,150	—4,150	68.70	26.72	10.91	—6.33	1,091	—69 00	291	12
2,900	2,407	23.47	50.00	14.50	12.03	555	66 00	277	13
9,070	8,995	61.06	17.79	10.62	10.53	970	102 00	172	14
3,650	4,479	61.17	15.61	10.42	12.80	1,166	149 00	83	15
5,520	—1,900	57.88	34.58	11.50	—3.96	436	—17 00	150	16
2,770	4,288	51.12	20.65	11.08	17.15	694	119 00	143	17
7,200	6,500	44.67	32.50	12.00	10.83	666	72 00	216	18
3,010	390	60.00	26.40	12.04	1.56	1,136	17 00	300	19
42,388	81,491	43.97	21.99	11.65	22.39	1,866	417 00	410	20
5,840	—840	68.00	22.00	11.68	—1.68	1,388	—23 00	305	21
2,720	880	47.83	36.52	11.83	3.82	1,000	38 00	365	22
1,940	1,460	47.06	32.94	11.41	8.59	894	76 00	294	23
18,000	—13,207	71.83	25.48	12.00	—8.81	1,875	—165 00	477	24
10,506	—2,748	51.17	39.16	13.10	—3.43	880	—30 00	344	25
48,175	30,523	45.44	32.40	13.57	8.59	1,041	89 00	337	26
11,800	—1,800	62.00	28.00	11.80	—1.80	1,190	—21 00	333	27
24,500	24,500	50.50	25.00	12.25	12.25	1,408	172 00	352	28
29,000	—19,300	71.27	25.00	11.15	—7.42	1,214	—90 00	303	29
2,860	—860	68.00	24.00	11.44	—3.44	1,000	—34 00	240	30
34,000	19,000	61.20	17.60	13.60	7.60	1,748	132 00	307	31
2,100	1,900	40.00	33.33	14.00	12.67	2,500	316 00	833	32
5,200	1,800	60.00	22.50	13.00	4.50	1,081	48 00	243	33
1,740	1,260	46.67	33.33	11.60	8.40	1,153	96 00	384	34
2,180	3,120	37.50	36.00	10.90	15.60	2,000	312 00	720	35
7,845	—3,195	57.31	36.00	11.29	—4.60	1,389	—63 00	500	36
3,240	1,760	50.00	33.33	10.80	5.87	1,500	88 00	500	37
23,445	—14,745	90.76	4.86	11.81	—7.43	1,444	—776 00	507	38
14,000	—5,000	76.93	14.42	13.46	—4.81	5,200	—250 00	750	39
13,500	16,500	44.45	22.22	15.00	18.33	1,500	275 00	333	40
8,300	11,700	50.00	25.00	10.37	14.63	888	130 00	222	41
16,490	1,148	57.10	19.35	22.02	1.53	2,496	38 00	483	42
1,430	1,870	2.14	74.29	10.21	13.36	538	72 00	400	43
694	766	1.48	76.93	10.26	11.33	338	38 00	260	44
1,740	—240	43.33	46.67	11.60	—1.60	750	—12 00	350	45
834	476	1.83	82.24	10.14	5.79	205	11 00	169	46
4,640	2,960	57.69	24.04	11.15	7.12	770	54 00	185	47
2,360	—660	2.17	90.44	10.26	—2.87	561	—16 00	507	48
1,200	1,160	2.05	77.78	10.26	9.91	390	38 00	303	49
1,596	504	3.20	83.34	10.23	3.23	445	14 00	371	50
1,506	6,194	.67	48.00	10.04	41.29	750	309 00	360	51
9,900	24,100	55.56	6.67	11.00	26.77	2,812	753 00	187	52
31,831	—3,797	58.03	30.85	12.62	—1.50	1,009	—15 00	311	53
4,100	4,900	51.43	22.86	11.71	14.00	673	94 00	153	54
1,430	570	2.14	83.57	10.22	4.07	560	22 00	468	55

CLOTHING — Continued.

ESTABLISHMENTS.	Average number of employ'cs.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit	Percentage of gross profit of value of product.
56	60	\$100,000	\$35,000	\$150,000	\$200,000	\$15,000	7.50
57	67	9,000	16,000	84,000	120,000	20,000	16.67
58	16	3,000	8,923	4,000	15,000	2,077	13.84
59	40	75,000	17,500	384,000	484,000	82,500	17.04
60	300	101,893	82,782	302,481	430,273	45,010	10.46
61	60	2,000	13,500	15,000	30,000	1,500	5.00
62	203	6,000	97,330	80,000	200,000	22,670	11.33
63	34	19,700	14,662	19,690	50,298	15,946	31.70
64	17	5,000	8,976	18,288	35,951	8,687	24.16
65	13	4,000	5,014	10,000	20,000	4,956	24.78
66	50	10,000	30,000	45,000	87,000	12,000	13.79
67	14	8,000	7,000	8,500	20,000	4,500	22.50
68	43	10,000	15,500	14,000	40,000	10,500	26.25
69	8	1,500	5,100	6,000	17,000	5,900	34.71
70	9	2,000	6,500	10,000	17,000	500	2.94
71	15	500	7,000	7,500	16,000	1,500	9.37
72	18	6,000	9,360	20,000	35,000	5,640	16.11
73	18	4,000	9,000	18,000	32,000	5,000	15.62
74	13	8,000	9,516	9,000	23,000	4,484	19.49
75	16	3,500	6,929	12,000	20,000	1,071	5.36
76	11	5,000	6,000	15,000	27,000	6,000	22.22
77	23	15,000	12,433	17,000	43,000	13,567	31.55
78	30	25,000	15,000	15,000	45,000	15,000	33.33
79	18	10,000	7,452	18,000	30,000	4,548	15.16
80	21	11,000	20,000	20,000	45,500	5,500	12.09
81	16	20,000	12,000	40,000	60,000	8,000	13.33
82	15	2,000	10,350	20,000	40,000	9,650	24.12
83	14	2,000	6,000	8,000	18,000	4,000	22.22
84	12	8,000	6,000	10,000	30,000	14,000	46.67
85	8	7,500	5,035	16,325	29,788	8,428	28.29
86	9	3,000	6,000	9,000	24,500	9,500	38.77
87	41	25,000	30,000	40,000	95,000	25,000	26.31
88	10	5,000	5,500	7,500	18,000	5,000	27.77
89	9	5,000	5,060	6,200	15,404	4,144	26.90
90	23	6,000	13,112	15,000	45,000	16,888	37.53
91	13	5,000	7,500	9,000	21,000	4,500	21.43
92	10	7,000	5,500	10,000	25,000	9,500	38.00
93	83	30,000	50,000	44,000	110,000	16,000	14.54
94	10	4,000	6,500	12,500	25,000	6,000	24.00
95	16	5,000	8,000	15,000	30,000	7,000	23.33
96	13	10,000	7,513	9,307	25,675	8,855	34.48
97	12	3,000	7,000	12,000	25,000	6,000	24.00
98	12	9,000	6,564	8,322	21,719	6,833	31.46
99	14	7,500	8,486	13,700	30,000	7,814	26.04
100	25	15,000	13,276	25,000	50,000	11,724	23.45
101	13	8,000	5,500	1,000	25,000	18,500	74.00
102	95	60,000	55,000	75,000	180,000	50,000	27.78
103	11	5,000	5,400	16,000	30,000	8,600	28.67
104	23	7,000	12,000	18,000	40,000	10,000	25.00
105	43	20,000	24,500	38,000	75,000	12,500	16.66
106	14	7,000	6,956	9,353	22,534	6,225	27.62
107	30	10,000	15,000	12,000	33,000	6,000	18.18
108	30	20,000	25,000	40,000	119,000	54,000	45.38
109	29	10,000	13,500	16,000	40,000	10,500	26.25
110	20	5,000	8,000	15,000	30,000	7,000	23.33

CLOTHING — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$26,000	—\$11,000	75.00	17.50	13.00	—5.50	\$3,333	—\$183 00	\$6583	56
12,540	7,460	70.00	13.33	10.45	6.22	1,791	111 00	266	57
1,680	397	26.67	59.49	11.20	2.64	938	25 00	558	58
52,900	29,600	79.34	3.62	10.92	6.12	12,100	740 00	437	59
49,141	—4,131	70 30	19.24	11.42	—96	1,434	—13 00	275	60
3,120	—1,620	50.00	45.00	10.40	—5.40	500	—27 00	225	61
20,360	2,310	40.00	48.67	10.18	1.15	985	11 00	479	62
6,212	9,734	39.15	29.15	12.35	19.35	1,479	286 00	431	63
3,895	4,792	50.87	24.97	10.83	13.33	2,114	281 00	528	64
2,240	2,716	50.00	25.22	11.20	13.58	1,538	208 00	388	65
9,300	2,700	51.73	34.48	10.69	3.10	1,740	54 00	600	66
2,480	2,020	42.50	35 00	12.40	10.10	1,428	144 00	500	67
4,600	5,900	35.00	38.75	11.50	14 75	930	137 00	360	68
1,790	4,110	35.29	30.00	10.53	24.18	2,125	513 00	637	69
1,820	—1,320	58.82	38.24	10.70	—7.76	1,888	—153 00	722	70
1,630	—130	46 88	43.75	10.18	—81	1,066	—8 66	466	71
3,860	1,780	57.15	26.74	11.03	5.08	1,944	98 00	520	72
3,440	1,560	56.25	28.13	10.75	4.87	1,777	86 00	500	73
2,780	1,704	39.13	41.38	12.08	7.41	1,769	131 00	732	74
2,210	—1,139	60.00	34.64	11.05	—5.69	1,250	—71 00	433	75
3,000	3,000	55.56	22.22	11.11	11.11	2,454	272 00	545	76
5,200	8,367	39.53	28.92	12.09	19.46	1,869	363 00	540	77
6,000	9,900	33 34	33 33	13.33	20.00	1,500	300 00	500	78
3,600	948	30 34	24 84	12.00	3.16	1,666	52 00	414	79
5,210	290	43.95	43.96	11.45	.64	2,166	13 00	952	80
7,200	800	66.67	20 00	12.00	1.33	3,750	50 00	750	81
4,120	5,530	50.00	25 88	10.30	13.82	2,666	368 00	690	82
1,920	2,080	44.45	33.33	10.67	11.55	1,285	148 00	428	83
3,480	10,520	33.33	20.00	11.60	35.07	2,500	876 00	500	84
3,429	4,999	54.81	16.90	11.51	16.78	3,723	624 00	629	85
2,630	6,870	36.74	24.49	10.73	28.04	2,722	763 00	666	86
11,000	14,000	42.11	31.58	11.57	14.74	2,317	317 00	731	87
2,100	2,900	41.67	30.56	11.66	16.11	1,800	290 00	550	88
1,840	2,304	40.25	32.85	11.94	14.96	1,711	256 00	562	89
4,860	12,028	33.33	29.14	10.80	26.73	1,956	522 00	570	90
2,400	2,100	42.86	35.71	11.43	10 00	1,615	161 00	576	91
2,920	6,580	40.00	22.00	11.68	26.32	250	658 00	550	92
12,800	3,200	40.00	45.46	11.63	2.91	1,325	38 00	602	93
2,740	3,260	50.00	26.00	10.96	13.04	2,500	326 00	650	94
3,300	3,700	50 00	26 67	11.00	12.33	1,875	231 00	500	95
3,168	5,687	36.25	29.27	12.33	22.15	1,975	429 00	577	96
2,680	3,320	48.00	28.00	10.72	13.28	2,083	276 00	583	97
2,712	4,121	38.32	30.22	12.49	18.97	1,809	343 00	547	98
3,450	4,364	45.67	28.29	11.50	14 54	2,142	311 00	606	99
5,900	5,824	50.00	26.55	11.80	11.65	2,000	232 00	531	100
2,980	15,520	4.00	22.00	11.92	62.08	1,923	1,193 00	423	101
21,600	28,400	41.67	30.55	12.00	15.78	1,894	293 00	578	102
3,300	5,300	53.33	18.00	11.00	17.67	2,727	481 00	490	103
4,420	5,580	45.00	30.00	11.05	13.95	1,739	242 00	521	104
8,700	3,800	50.67	32.67	11.60	5.06	1,744	88 00	569	105
2,673	3,552	41.51	30.87	11.86	15.76	1,609	253 00	496	106
3,900	2,100	36.36	45.46	11.82	6.36	1,100	70 00	500	107
13,100	40,900	33.61	21.01	11.01	34.37	3,966	1,363 00	833	108
4,600	5,900	40 00	33.75	11.50	14.75	1,379	203 00	465	109
3,300	3,700	50.00	26.67	11.00	12.33	1,500	185 00	400	110

CLOTHING — Concluded.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
111	21	\$12,000	\$11,600	\$12,500	\$32,000	\$7,900	24.69
112	12	5,000	5,250	8,000	18,000	4,750	26.39
113	75	25,000	25,000	50,000	100,000	25,000	25.00
114	16	3,000	8,000	10,000	25,000	7,000	28.00
115	13	4,000	6,000	10,000	25,000	9,000	36.00
116	26	10,000	10,000	25,000	50,000	15,000	30.00
117	12	3,000	6,600	10,000	30,000	13,400	44.67
118	12	1,000	7,000	12,000	23,000	4,000	17.39
119	30	15,000	15,000	25,000	55,000	15,000	27.27
120	14	5,000	6,000	7,000	19,000	6,000	31.58
121	31	15,000	16,000	24,000	50,000	10,000	20.00
122	18	9,000	9,000	15,000	35,000	11,000	31.43
123	55	25,000	10,000	125,000	170,000	35,000	20.59
124	40	10,000	19,400	17,900	43,000	5,700	13.25
125	200	20,000	31,000	100,000	155,000	24,000	15.48
126	50	10,000	12,000	30,000	48,000	6,000	12.50
127	20	4,000	6,500	13,400	22,000	2,100	9.54
128	60	25,000	16,878	68,000	100,000	15,122	15.12
129	320	100,000	75,000	200,000	290,000	15,000	5.18
130	80	40,000	36,000	100,000	200,000	64,000	32.00
131	31	25,000	11,500	34,432	48,932	3,000	6.13
132	43	5,000	13,482	8,000	27,000	5,518	20.44
133	16	15,000	6,701	27,125	43,646	9,820	22.50
134	90	50,000	20,500	116,000	158,000	21,500	13.61
135	70	50,000	68,644	215,000	320,000	36,356	11.36
136	149	165,000	106,000	389,000	580,000	85,000	14.65
137	72	75,000	25,000	175,000	250,000	50,000	20.00
138	550	100,000	100,000	300,000	500,000	100,000	20.00
139	250	550,000	250,000	800,000	1,500,000	450,000	30.00
140	25	3,000	6,000	9,000	20,000	5,000	25.00
141	73	10,000	24,000	52,000	88,000	12,000	13.64
142	175	50,000	17,936	83,000	117,000	16,064	13.73
143	25	8,000	8,600	32,500	45,000	3,900	8.67
144	53	30,000	19,692	90,269	130,000	20,039	15.42
145	50	28,000	6,500	60,000	82,000	15,500	18.90
146	16	8,000	6,250	20,000	28,000	1,750	6.25
147	50	75,000	20,000	100,000	125,000	5,000	1.17
148	106	15,000	15,000	15,000	100,000	70,000	70.00
149	206	13,000	20,000	60,000	86,000	6,000	6.97
150	600	200,000	200,000	300,000	600,000	100,000	16.67
151	128	100,000	85,000	630,000	850,000	135,000	15.88
152	31	12,600	11,482	51,484	64,802	1,836	2.83
153	60	500	8,000	60,000	70,000	2,000	2.85
154	296	25,000	85,600	145,743	254,888	23,545	9.23
155	55	20,000	15,000	13,000	40,000	12,000	30.00
156	22	50,000	10,692	152,000	225,000	62,308	27.69
157	800	550,000	350,000	900,000	1,450,000	200,000	13.79
158	400	300,000	150,000	800,000	1,100,000	150,000	13.63
159	52	200	5,000	3,000	10,000	2,000	20.00
160	100	50,000	40,850	200,000	260,000	19,150	7.36

CLOTHING — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$3,920	\$3,980	39.06	36.25	12.25	12.44	\$1,523	\$189 00	\$552	111
2,100	2,650	44.44	29.17	11.67	14.72	1,500	220 00	437	112
11,500	13,500	50.00	25.00	11.50	13.50	1,333	180 00	333	113
2,680	4,320	40.00	32.00	10.72	17.28	1,562	270 00	500	114
2,740	6,260	40 00	24.00	10.96	25.04	1,923	481 00	461	115
5,600	9,400	50.00	20.00	11.20	18.80	1,923	361 00	384	116
3,180	10,220	33.33	22.00	10.60	34.07	2,500	851 00	550	117
2,360	1,640	52.17	30.44	10.26	7.13	1,916	136 00	583	118
6,400	8,600	45.46	27.27	11.63	15.64	1,833	286 00	500	119
2,200	3,800	36.84	31.58	11.58	20.00	1,357	271 00	428	120
5,900	4,100	48.00	32.00	11.80	8.20	1,612	132 00	516	121
4,040	6,960	42.86	25 71	11.54	19.89	1,944	386 00	500	122
18,500	16,500	73.33	5 88	10.88	9.71	3,090	300 00	180	123
4,900	800	41.63	45 12	11 39	1.86	1,075	20 00	485	124
16,700	7,300	64.52	20.00	10.77	4.71	775	36 00	155	125
5,400	600	62 50	25.00	11.25	1.25	960	12 00	240	126
2,440	—340	60.91	29.55	11.09	—1.55	1,100	—17 00	325	127
11,500	3,622	68.00	16.88	11.50	3 62	1,666	60 00	281	128
35,000	—20,000	68.96	25 86	12.07	—6 89	906	—62 00	234	129
22,400	41,600	50.00	18.00	11.20	20.80	2,500	520 00	450	130
6,393	—3,393	70.37	23.50	13.06	—6.93	1,578	—109 00	370	131
3,000	2,518	29 62	49.94	11.11	9.33	627	58 00	313	132
5,265	4,555	62.15	15.35	12.06	10.44	2,727	284 00	218	133
18,800	2,700	73.42	12.97	11.90	1.71	1,755	30 00	227	134
35,000	1,356	67.19	21 45	10.93	.43	4,571	19 00	986	135
67,900	17,100	67.07	18.28	11.70	2.95	3,892	114 00	711	136
29,500	20,500	70 00	10.00	11.80	8.20	3,246	266 00	324	137
56,000	44,000	60.00	20.00	11.20	8.80	909	80 00	181	138
183,000	267,000	53.33	16.67	12.20	17.80	6,000	1,068 00	1,000	139
2,180	2,820	45.00	30.00	10.90	14.10	800	112 00	240	140
9,400	2,600	59.09	27.27	10.68	2.96	1,205	35 00	328	141
14,700	1,364	70.94	15.33	12.56	1.17	668	7 79	102	142
4,980	—1,080	72.22	19.11	11 07	—2.40	1,800	—43 00	344	143
14,800	5,239	69.43	15.15	11.39	4.03	2,452	98 00	371	144
9,880	5,620	73.17	7.93	12.05	6 85	1,640	112 00	120	145
3,280	—1,530	71.43	22.32	11.71	—5.46	1,750	—95 00	378	146
47,000	—42,000	94.12	4.71	11.05	—9.88	8,500	—840 00	400	147
10,900	59,100	15.00	15.00	10.90	59.10	943	557 00	141	148
9,380	—3,380	69.77	23.26	10.90	—3.93	417	—16 00	97	149
72,000	28,000	50.00	33.33	12.00	4.67	1,000	46 00	333	150
91,000	44,000	74.12	10.00	10.70	5.18	6,640	343 00	664	151
7,236	—5,400	79.45	17.71	11.17	—8.33	2,090	—174 00	370	152
7,030	—5,030	85.72	11.43	10.04	—7.19	1,166	—83 00	133	153
26,989	—3,444	57.18	33.58	10.59	—1.35	861	—11 00	289	154
5,200	6,800	32.50	37.50	13.00	17.00	727	123 00	272	155
25,500	36,808	67.56	4.75	11.33	16.36	10,227	1,673 00	486	156
178,000	22,000	62.07	24.14	12.27	1.52	1,812	27 00	437	157
128,000	22,000	72.73	13.64	11.63	2.00	2,750	55 00	375	158
1,012	988	30.00	50.00	10.12	9.88	192	19 00	96	159
29,000	—9,850	76.92	15.71	11.15	—3.78	2,600	—98 00	408	160

STATISTICS OF LABOR.

COTTON GOODS.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
1	3,050	\$2,500,000	\$704,252	\$1,047,000	\$2,000,000	\$248,748	12.43
2	1,525	2,090,000	413,578	1,519,553	2,429,000	495,869	20.41
3	1,564	2,000,000	364,217	1,159,015	3,076,599	1,553,367	50.49
4	2,780	1,821,268	666,000	1,609,525	2,856,473	580,948	20.33
5	1,077	1,200,000	319,672	1,105,258	1,900,825	475,895	25.03
6	953	605,000	235,856	600,051	1,020,000	184,093	18.05
7	716	650,000	178,849	658,680	1,024,993	187,464	18.29
8	163	100,000	43,018	104,059	173,089	26,012	15.03
9	39	30,000	12,400	23,000	50,000	14,600	29.20
10	40	18,000	11,000	30,000	57,000	16,000	28.07
11	112	80,000	12,193	24,000	50,000	13,807	27.61
12	1,207	800,000	339,001	490,422	936,921	107,498	11.47
13	59	50,000	14,596	30,000	54,911	10,315	18.78
14	54	85,000	17,000	58,757	86,127	10,370	12.04
15	37	37,000	8,560	35,810	50,000	5,630	11.26
16	58	125,000	18,215	65,454	110,641	26,972	24.37
17	870	500,000	259,000	358,000	780,000	163,000	20.89
18	31	50,000	7,000	26,625	42,000	8,375	19.94
19	244	275,000	70,150	228,790	315,588	16,648	5.27
20	212	325,000	58,770	105,883	211,250	46,597	22.06
21	173	300,000	44,462	91,080	200,000	64,458	32.23
22	136	276,273	29,795	68,144	140,161	42,222	30.12
23	156	288,791	38,134	89,789	190,527	62,604	32.85
24	106	100,000	23,400	46,500	80,000	10,100	12.62
25	44	20,000	9,600	30,000	52,800	13,200	25.00
26	211	416,412	39,946	104,487	208,077	63,644	30.58
27	1,045	1,460,000	282,691	1,020,283	1,478,208	175,234	11.85
28	1,748	2,000,000	520,585	825,000	1,550,000	204,415	13.18
29	499	450,000	141,686	280,143	541,096	119,267	22.04
30	1,046	800,000	275,000	545,000	1,043,000	223,000	21.38
31	155	250,000	37,399	81,771	158,000	38,830	24.57
32	252	390,000	53,000	162,000	288,600	73,600	25.50
33	252	1,207,000	71,811	162,498	280,971	46,662	16.61
34	278	150,000	50,174	111,644	225,000	63,182	28.08
35	261	300,000	61,519	115,099	240,000	63,382	26.41
36	313	210,000	62,329	123,306	237,382	51,747	21.80
37	343	200,000	118,276	196,105	350,000	35,619	10.18
38	252	175,000	44,682	104,753	250,000	100,565	40.22
39	1,422	1,700,000	286,800	828,917	1,445,045	329,328	22.79
40	108	100,000	18,708	37,750	63,631	7,173	11.27
41	72	90,000	15,878	43,444	76,114	16,792	22.06
42	238	395,520	65,685	160,647	285,336	59,004	20.67
43	408	550,000	140,353	320,330	554,088	93,405	16.85
44	209	548,620	82,441	185,951	312,595	44,203	14.14
45	104	190,000	27,300	58,000	95,300	10,000	10.49
46	1,054	1,000,000	235,470	575,000	1,000,000	189,530	18.95
47	500	1,000,000	122,312	277,953	487,894	87,629	17.96
48	312	900,000	87,104	194,000	370,097	88,993	24.04
49	387	800,000	115,103	190,840	464,253	158,310	34.10
50	834	1,750,000	213,586	423,552	987,194	350,056	35.45
51	295	300,000	75,940	147,783	259,279	35,556	13.71
52	435	836,391	149,699	280,867	530,927	100,361	18.90
53	742	1,154,500	209,328	468,676	893,636	215,632	24.12
54	423	680,758	127,944	127,105	476,300	221,251	46.45
55	543	1,900,000	142,330	280,587	517,598	94,681	18.29

COTTON GOODS.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$350,000	-\$101,252	52.35	35.22	17.50	-5.07	\$655	-\$33 00	\$230	1
362,900	132,969	62.56	17 03	14.94	5.47	1,592	86 00	271	2
427,666	1,125,701	37.67	11.84	13.90	36.59	1,967	719 00	232	3
394,923	186,025	56.35	23.32	13.82	6.51	1,027	66 00	239	4
262,083	213,812	58.15	16.82	13.78	11.25	1,764	198 00	296	5
105,630	78,463	58.83	23 12	10.35	7.70	1,070	82 00	247	6
141,499	45,965	64.26	17.45	13.80	4 49	1,431	64 00	249	7
23,309	2,703	60.12	24.85	13.47	1.56	1,061	16 00	263	8
6,800	7,800	46.00	24.80	13 60	15.60	1,282	200 00	317	9
6,780	9,220	52.63	19.30	11.89	16.18	1,425	230 00	275	10
9,800	4,007	48 00	24.39	19.60	8.01	446	35 00	108	11
141,692	-34,194	52.35	36.18	15.12	-3.65	776	-28 00	280	12
8,491	1,824	54.64	26.58	15.46	3.32	930	30 00	247	13
13,713	-3,343	68.22	19.74	15.92	-3.88	1,594	-61 00	314	14
7,220	-1,590	71.62	17.12	14.44	-3.18	1,351	-42 00	311	15
18,564	8,408	59.16	16.47	16.77	7.60	1,907	144 00	314	16
108,000	55,000	45.90	33 21	13 84	7.05	896	63 00	297	17
7,200	1,175	63.39	16.67	17.14	2.80	1,354	37 00	225	18
48,059	-31,411	72.50	22.23	15.22	-9.95	1,293	-128 00	287	19
40,625	5,972	50.12	27.82	19.23	2.83	996	28 00	277	20
38,000	26,458	45.54	22 23	19.00	13 23	1,156	152 00	257	21
30,592	11,630	48.62	21 26	21.82	8.30	1,030	85 00	219	22
36,380	26,224	47.13	20.02	19 09	13 76	1,221	168 00	244	23
14,000	-3,900	58.13	29.25	17.50	-4.88	754	-36 00	220	24
6,480	6,720	56.82	18.18	12.27	12.73	1,200	152 00	218	25
45,792	17,852	50.22	19 20	22.00	8.58	986	84 00	189	26
235,421	-60,187	69.02	19.13	15.92	-4.07	1,414	-57 00	270	27
275,000	-70,585	53.23	33.59	17.74	-4.56	886	-40 00	297	28
81,110	38,157	51.77	26.19	14.98	7.06	1,084	76 00	283	29
152,300	70,700	52.25	26.37	14.60	6.78	997	67 00	262	30
30,800	8,030	51.76	23 67	19.49	5.08	1,019	51 00	241	31
52,260	21,340	56.13	18.37	18.11	7.39	1,145	84 00	210	32
100,517	-53,855	57.83	25.56	35.77	-19.16	1,114	-213 00	284	33
31,500	31,682	49.62	22.30	14.00	14.08	809	113 00	180	34
42,000	21,382	47.96	25.63	17.50	8.91	919	81 00	235	35
36,338	15,409	51.94	26.26	15.31	6.49	758	49 00	199	36
47,000	-11,381	56.03	33.79	13.43	-3.25	1,020	-33 00	344	37
35,500	65,065	41.90	17.88	14.20	26.02	992	258 00	177	38
246,505	82,823	57.36	19.85	17.05	5.74	1,016	58 00	201	39
12,363	-5,190	59.33	29.40	19.42	-8.15	589	-48 00	173	40
13,011	3,781	57.08	20.86	17.09	4.97	1,057	52 00	220	41
52,265	6,739	56.31	23.02	18 31	2.36	1,198	28 00	275	42
88,409	4,996	57.82	25.33	15.95	.90	1,358	12 00	344	43
64,177	-19,974	59.49	26.37	20.53	-6.39	1,045	-66 00	275	44
20,930	-10,930	60.86	28.65	21.96	-11.47	916	-105 00	262	45
160,000	29,530	57.50	23.55	16.00	2.95	948	28 00	223	46
108,789	-21,160	56.97	25.07	22.29	-4.33	975	-42 00	244	47
91,010	-2,017	52.42	23.54	24.59	-.55	1,186	-6 46	279	48
94,425	63,885	41.11	24.79	20.34	13.76	1,199	165 00	297	49
203,719	146,337	42.91	21.64	20.63	14.82	1,183	175 00	256	50
43,928	-8,372	57.00	29 29	16.94	-3.23	878	-28 00	257	51
103,276	-2,915	52.90	28.20	19.45	-.55	1,220	-6 70	344	52
158,634	56,998	52.45	23.43	17.75	6.37	1,204	76 00	282	53
88,475	132,776	26.69	26.86	18.57	27.88	1,126	313 00	302	54
111,760	-17,079	54.21	27.50	21.59	-3.30	953	-31 00	262	55

STATISTICS OF LABOR.

COTTON GOODS — Continued.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
56	845	\$1,500,000	\$217,680	\$457,936	\$862,710	\$187,094	21.68
57	250	370,000	85,500	170,000	325,500	70,000	21.50
58	192	250,000	46,708	217,949	340,112	75,455	22.18
59	289	500,000	77,979	162,485	329,441	88,977	27.01
60	378	707,929	117,750	218,517	501,448	165,181	32.94
61	638	572,400	142,294	389,851	694,148	162,003	23.33
62	138	136,000	27,452	60,205	109,686	22,029	20.03
63	481	800,000	116,309	269,232	519,759	134,218	25.82
64	350	260,000	69,711	165,000	294,000	59,289	20.16
65	452	500,000	117,620	281,379	542,556	143,557	26.45
66	398	819,947	114,302	278,810	536,442	143,330	26.71
67	361	875,000	109,980	245,318	496,389	141,091	28.42
68	341	660,000	89,464	201,205	371,211	80,542	21.69
69	384	886,441	125,997	293,960	579,640	159,683	27.54
70	379	600,000	94,242	192,580	356,407	69,585	19.53
71	890	750,000	173,900	397,508	772,890	201,482	26.06
72	592	1,400,000	183,445	430,165	826,000	212,390	25.71
73	382	614,820	95,559	211,276	395,148	88,313	22.34
74	62	75,000	13,741	72,251	102,341	16,349	15.97
75	1,810	2,998,176	586,144	891,376	2,260,108	782,588	34.62
76	933	1,626,136	260,607	499,579	963,497	203,311	21.10
77	75	160,000	24,546	78,189	120,000	17,265	14.39
78	28	60,000	8,688	48,702	61,500	4,110	6.68
79	825	370,000	226,431	469,062	976,390	280,897	28.76
80	74	100,000	24,000	147,000	250,000	79,000	31.60
81	177	75,000	30,095	106,802	177,673	40,776	22.95
82	110	60,000	31,800	57,000	102,058	13,258	12.99
83	88	60,000	21,713	59,077	111,472	30,682	27.52
84	107	70,000	22,943	49,000	93,096	21,153	22.72
85	38	60,000	12,013	68,760	89,355	8,582	9.60
86	72	15,000	22,200	38,500	56,840	-3,860	-6.79
87	179	300,000	55,200	136,800	207,009	15,009	7.25
88	937	1,500,000	275,000	761,737	1,365,000	328,263	24.04
89	1,516	1,800,000	345,897	995,737	1,700,000	358,366	21.08
90	326	160,000	70,338	247,824	459,877	141,715	30.81
91	101	80,000	24,658	71,743	117,500	21,099	17.95
92	694	1,100,000	188,370	298,335	692,999	206,294	29.76
93	1,216	1,470,000	304,571	516,268	1,200,000	379,161	31.59
94	425	500,000	129,818	284,983	618,477	203,676	32.93
95	565	300,000	134,398	256,598	468,845	77,849	16.60
96	278	350,000	64,126	293,059	499,583	142,398	28.50
97	441	440,000	117,856	223,777	486,246	144,613	29.74
98	666	1,110,000	169,593	479,964	830,564	181,007	21.79
99	36	30,000	11,210	15,760	37,000	10,030	27.10
100	250	377,250	54,533	162,514	300,000	82,953	27.65
101	90	100,000	20,000	100,000	275,000	155,000	56.36
102	65	55,400	19,971	75,000	105,725	10,754	10.17
103	344	325,000	74,778	186,922	309,122	47,422	15.34
104	65	25,000	15,000	50,000	75,000	10,000	13.33
105	98	50,000	23,874	77,241	139,858	38,743	27.70
106	395	450,000	96,308	110,203	234,358	27,847	11.88
107	1,285	500,000	298,660	524,430	1,101,811	278,721	25.29
108	65	50,000	19,750	56,725	109,350	32,875	30.06
109	62	40,000	21,600	45,000	80,000	13,400	16.75
110	59	50,000	10,000	40,000	58,750	8,750	14.89

COTTON GOODS — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employee.	Average yearly net profit per employee.	Average yearly earnings of each employee.	ESTABLISHMENTS.
\$176,271	\$10,823	53.08	25.24	20.43	1.25	\$1,020	\$12 00	\$257	56
54,750	15,250	52.23	26.27	16.82	4.68	1,302	61 00	312	57
49,011	26,444	64.08	13.74	14.41	7.77	1,771	137 00	243	58
62,944	26,033	49.32	23.67	19.11	7.90	1,139	90 00	269	59
92,621	72,560	43.58	23.48	18.47	14.47	1,326	191 00	311	60
103,759	58,244	56.16	20.51	14.94	8.39	1,088	91 00	223	61
19,129	2,900	54.89	25.03	17.44	2.64	794	21 00	198	62
99,976	34,242	51.80	22.38	19.23	6.59	1,080	71 00	241	63
45,000	14,289	56.13	23.71	15.30	4.86	840	40 00	199	64
84,256	59,301	51.87	21.68	15.52	10.93	1,200	131 00	260	65
102,841	40,489	51.98	21.31	19.17	7.54	1,347	101 00	287	66
102,139	38,952	49.42	22.16	20.57	7.85	1,375	107 00	304	67
76,721	3,821	54.21	24.10	20.66	1.03	1,088	11 00	262	68
111,150	48,533	50.72	21.74	19.17	8.37	1,509	126 00	328	69
71,641	-2,056	54.03	26.44	20.10	-5.7	940	-5 42	248	70
122,289	79,193	51.44	22.50	15.82	10.24	868	89 00	194	71
166,600	45,790	52.08	22.21	20.17	5.54	1,395	77 00	309	72
76,404	11,909	53.47	24 19	19.33	3 01	1,034	31 00	250	73
14,734	1,615	70.60	13.43	14.39	1.58	1,650	26 00	221	74
405,901	376,687	39.44	25.94	17.96	16.66	1,248	208 00	323	75
193,918	9,303	51.85	27.05	20.13	.97	1,032	10 00	279	76
21,600	-4,335	65.16	20.45	18.00	-3 61	1,600	-57 00	327	77
9,750	-5,640	79.19	14.13	15.85	-9.17	2,196	-201 00	310	78
119,839	161,058	48.04	23.20	12.27	16.49	1,181	195 00	274 79	
31,000	48,000	58.80	9.60	12.40	19.20	3,378	648 00	324	80
22,267	18,509	60.11	16.94	12.53	10.42	1,003	104 00	170	81
13,806	-548	55.85	31.16	13.52	-5.3	927	-4 98	289	82
14,747	15,935	53.00	19.48	13.23	14.29	1,266	181 00	246	83
13,510	7,643	52.63	24.65	14.51	8.21	870	71 00	214	84
12,536	-3,954	76.95	13.45	14.02	-4 42	2,351	-104 00	316	85
6,584	-10,414	67.73	39.06	11.58	-18.37	789	-145 00	308	86
38,701	-23,692	66.09	26.66	18.69	-11.44	1,156	-132 00	308	87
226,500	101,763	55.81	20.15	16.59	7.45	1,456	108 00	293	88
278,000	80,366	58.57	20.35	16.35	4.73	1,121	53 00	228	89
55,588	86,127	53.89	15.30	12.08	18.73	1,410	264 00	215	90
16,550	4,549	61.06	20.99	14.08	3.87	1,163	45 00	244	91
135,300	70,904	43.05	27.19	19.52	10.24	998	102 00	271	92
208,200	170,961	43.03	25.38	17.35	14.24	986	140 00	250	93
91,848	111,828	46.08	20.99	14.85	18.08	1,455	263 00	305	94
64,885	12,964	54.73	28.67	13.83	2.77	829	22 00	237	95
70,958	71,440	58.66	12.84	14.20	14.30	1,797	256 00	230	96
75,025	69,588	46.02	24.24	15.43	14.31	1,102	157 00	267	97
149,656	31,351	57.79	20.42	18.02	3.77	1,247	47 00	254	98
5,500	4,530	42.60	30.30	14.86	12.24	1,027	125 00	311	99
52,635	30,318	54.18	18.17	17.54	10.11	1,200	121 00	218	100
33,500	121,500	36.37	7.27	12.18	44.18	3,055	1,350 00	222	101
13,897	-3,143	70.94	18.89	13.14	-2.97	1,626	-48 00	307	102
50,412	-2,990	60.47	24.19	16.30	.96	898	-8 69	217	103
9,000	1,000	66.67	20.00	12.00	1.33	1,153	15 00	230	104
16,986	21,757	55.23	17.07	12.15	15.55	1,427	222 00	243	105
50,436	-22,589	47.02	41.10	21.52	-9.64	593	-57 00	243	106
140,181	138,540	47.60	27.11	12.72	12.57	857	107 00	232	107
13,935	18,940	51.88	18.06	12.74	17.32	1,682	291 00	303	108
10,400	3,000	56.25	27.00	13.00	3.75	1,290	48 00	348	109
8,875	-125	68.09	17.02	15.10	-2.1	995	-2 11	169	110

COTTON GOODS — Concluded.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
111	60	\$45,000	\$15,500	\$60,930	\$95,887	\$19,457	20.29
112	642	1,000,000	179,059	372,192	617,000	65,749	10.65
113	98	200,000	25,752	106,217	147,366	15,397	10.45
114	1,286	600,000	450,018	434,924	1,312,766	427,824	32.58
115	81	80,000	17,230	46,048	84,000	20,722	24.66
116	100	100,000	26,000	98,000	160,000	36,000	22.50
117	128	150,000	22,000	55,647	91,800	14,153	15.42
118	121	115,000	39,142	43,344	110,000	27,514	25.01
119	123	175,000	28,443	47,717	103,528	27,368	26.43
120	55	50,000	12,000	29,000	50,000	9,000	18.00
121	70	30,000	12,000	25,460	50,000	12,540	25.08
122	36	30,000	10,249	16,426	35,000	8,325	23.78
123	51	30,000	13,000	23,540	58,000	21,460	37.00
124	130	210,000	35,750	114,346	183,666	33,570	18.27
125	21	30,000	5,000	11,329	15,600	—729	—4.67
126	124	120,000	21,642	40,500	64,222	2,080	3.24
127	50	80,000	14,396	31,809	69,000	22,795	33.03
128	50	45,000	13,385	42,282	71,832	16,165	22.50
129	205	250,000	47,935	81,934	192,886	63,017	32.67
130	85	100,000	21,744	36,500	94,877	36,633	38.61
131	149	200,000	37,193	59,914	159,261	62,154	39.02
132	168	200,000	42,500	93,675	164,500	28,325	17.22
133	67	30,000	12,500	45,500	75,000	17,000	22.66
134	118	170,000	27,017	94,371	126,376	4,988	3.95
135	30	1,250	8,400	48,250	60,000	3,350	5.58
136	186	150,000	34,541	86,908	180,000	58,551	32.53
137	335	500,000	102,254	207,066	470,000	160,680	34.18
138	117	100,000	21,601	47,363	84,000	15,036	17.90
139	125	160,000	34,781	54,065	117,634	28,788	24.47
140	561	300,000	168,000	296,000	500,000	36,000	7.20
141	492	450,000	149,160	473,129	732,304	110,015	15.02
142	465	400,000	104,000	166,786	336,000	65,214	19.41
143	157	100,000	38,630	93,400	190,547	58,517	30.71
144	226	300,000	45,769	200,610	336,773	90,394	26.84
145	20	30,000	6,300	13,000	40,000	20,700	51.75
146	243	187,500	46,237	125,305	210,000	38,458	18.31
147	15	20,000	5,000	18,050	30,000	6,950	23.16
148	44	65,000	10,344	30,184	44,043	3,515	7.98
149	69	80,000	12,928	32,758	75,501	29,815	39.48
150	47	60,000	10,778	25,203	59,972	23,991	40.00

FOOD PREPARATIONS.

1	13	\$3,000	\$8,000	\$75,000	\$88,000	\$5,000	5.68
2	180	50,000	60,000	175,000	304,000	69,000	22.03
3	28	8,000	6,000	25,000	40,000	9,000	22.50
4	33	47,000	11,000	79,000	100,000	10,000	10.00
5	54	35,000	24,000	60,000	115,000	31,000	26.95
6	130	350,000	86,799	5,938,680	6,361,679	336,200	5.28
7	28	20,000	11,000	48,000	60,000	1,000	1.67
8	75	225,000	37,000	1,140,000	1,245,625	68,625	5.58
9	400	300,000	187,200	4,950,000	5,576,000	438,800	7.86
10	25	30,000	12,980	108,000	127,565	6,585	5.16

COTTON GOODS — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employé.	Average yearly net profit per employé.	Average yearly earnings of each employé.	ESTABLISHMENTS.
\$12,289	\$7,168	63.54	16.17	12.81	7.48	\$1,598	\$119 00	\$258	111
121,700	—55,951	60.33	29.02	19.72	—9.07	961	—87 00	278	112
26,737	—11,340	72.08	17.47	18.14	—7.69	1,503	—115 00	262	113
167,277	260,547	33.14	34.28	12.74	19.84	1,020	202 00	349	114
13,200	7,522	54.82	20.52	15.71	8.95	1,037	92 00	212	115
22,000	14,000	61.25	16.25	13.75	8.75	1,600	140 00	260	116
18,180	—4,027	60.62	23.96	19.80	—4.38	717	—31 00	171	117
17,900	9,614	39.41	35.58	16.27	8.74	909	79 00	323	118
20,853	6,515	46.09	27.48	20.14	6.29	841	52 00	231	119
8,000	1,000	58.00	24.00	16.00	2.00	909	18 00	218	120
6,800	5,740	50.92	24.00	13.60	11.48	714	82 00	171	121
5,300	3,025	46.94	29.28	15.14	8.64	972	84 00	284	122
7,600	13,860	40.59	22.41	13.11	23.89	1,156	271 00	254	123
30,967	2,603	62.26	19.47	16.86	1.41	1,412	20 00	275	124
3,360	—4,089	72.62	32.05	21.54	—26.21	742	—194 00	238	125
13,622	—11,542	63.06	33.70	21.21	—17.97	517	—93 00	174	126
11,700	11,095	46.10	20.87	16.96	16.07	1,380	221 00	287	127
9,883	6,282	58.86	18.64	13.76	8.74	1,436	125 00	267	128
34,289	28,728	42.48	24.85	17.78	14.89	940	140 00	233	129
15,488	21,145	38.47	22.92	16.32	22.29	1,116	248 00	255	130
27,926	34,228	37.63	23.35	17.53	21.49	1,068	229 00	249	131
28,450	—125	56.95	25.83	17.29	—0.07	979	— 74	252	132
9,300	7,700	60.67	16.67	12.40	10.26	1,119	114 00	186	133
22,838	—17,850	74.67	21.38	18.07	—14.12	1,070	—151 00	228	134
6,075	—2,725	80.42	14.00	10.12	—4.54	2,000	—90 00	280	135
27,000	31,551	48.28	19.19	15.00	17.53	967	169 00	185	136
77,000	83,680	44.06	21.76	16.38	17.80	1,402	249 00	305	137
14,400	636	56.38	25.72	17.14	.76	717	543 00	184	138
21,363	7,425	45.96	29.57	18.16	6.31	941	59 00	277	139
68,000	—32,000	59.20	33.60	13.60	—6.40	891	—57 00	299	140
100,230	9,785	64.61	20.37	13.68	1.34	1,488	19 00	303	141
57,600	7,614	49.64	30.95	17.14	2.27	722	16 00	223	142
25,055	33,462	49.02	20.27	13.15	17.56	1,213	213 00	246	143
51,677	38,717	59.57	13.59	15.34	11.50	1,490	171 00	202	144
5,800	14,900	32.50	15.75	14.50	37.25	2,000	745 00	315	145
32,250	6,208	59.67	22.02	15.35	2.96	864	25 00	190	146
4,200	2,750	60.17	16.67	14.00	9.16	2,000	150 00	333	147
8,304	—4,789	68.53	23.49	18.85	—10.87	1,000	—108 00	235	148
12,350	17,465	43.39	17.13	16.35	23.13	1,094	253 00	187	149
9,597	14,394	42.03	17.97	16.00	24.00	1,276	306 00	229	150

FOOD PREPARATIONS.

\$8,980	—\$3,980	85.23	9.09	10.20	—\$4.52	\$6,769	—\$306 00	\$615	1
33,400	35,600	57.57	19.74	10.98	11.71	1,688	197 00	333	2
4,480	4,520	62.50	15.00	11.20	11.30	1,428	161 00	214	3
12,820	—2,820	79.00	11.00	12.82	—2.82	3,030	—85 00	333	4
13,600	17,400	52.18	20.87	11.82	15.13	2,129	322 00	444	5
657,168	—320,968	93.34	1.37	10.33	—5.04	48,935	—2,468 00	667	6
7,200	—6,200	80.00	13.33	12.00	—10.33	2,142	—221 00	392	7
138,063	—69,438	91.53	2.97	11.08	—5.58	16,608	—925 00	493	8
575,600	—136,800	88.78	3.36	10.32	—2.46	13,940	—342 00	468	9
14,557	—7,972	84.67	10.17	11.40	—6.24	5,102	—318 00	519	10

FOOD PREPARATIONS — Continued.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit or value of product.
11	11	\$20,000	\$6,000	\$30,000	\$50,000	\$14,000	28.00
12	13	12,000	6,000	15,000	24,000	3,000	12.50
13	20	10,000	6,000	55,000	75,000	14,000	18.66
14	206	459,840	90,339	2,008,546	2,291,851	192,966	8.41
15	80	300,000	32,000	1,355,000	1,405,000	18,000	1.28
16	17	20,000	13,000	52,000	74,000	9,000	12.16
17	11	10,000	6,000	16,000	25,000	3,000	12.00
18	16	50,000	7,800	60,000	75,000	7,200	9.60
19	8	4,000	6,000	20,000	30,000	4,000	13.33
20	9	5,000	5,500	17,400	25,000	2,100	8.40
21	11	9,840	6,500	17,500	28,000	4,000	14.28
22	10	11,000	7,000	15,000	30,000	8,000	26.66
23	13	4,000	5,000	25,000	36,000	6,000	16.66
24	30	35,000	17,800	74,900	97,500	4,800	4.92
25	8	8,000	6,000	5,000	15,000	4,000	26.66
26	23	25,000	12,012	20,000	70,000	37,988	54.26
27	20	50,000	6,600	158,000	175,000	10,400	5.94
28	21	30,000	10,000	174,000	210,000	26,000	12.38
29	42	20,000	17,000	93,000	125,000	15,000	12.00
30	16	20,000	5,700	39,653	51,400	6,047	11.76
31	32	10,000	10,023	60,585	73,335	2,727	3.71
32	22	40,000	10,340	74,895	94,950	9,715	10.23
33	18	15,000	6,595	104,300	114,000	3,105	2.72
34	15	40,000	8,500	222,575	275,000	43,925	15.97
35	8	75,000	6,000	380,375	400,000	13,625	3.40
36	20	20,000	9,350	31,700	78,000	36,950	47.37
37	20	20,000	11,625	40,000	60,000	8,375	13.95
38	39	75,000	21,500	130,000	175,000	23,500	13.42
39	12	10,000	6,000	24,000	35,000	5,000	14.28
40	30	80,000	17,718	881,272	939,300	40,310	4.29
41	61	100,000	47,733	1,221,679	1,297,268	27,856	2.14
42	5	50,000	5,000	320,600	332,000	6,400	1.92
43	18	100,000	9,720	860,228	998,800	128,852	12.90
44	8	10,000	6,000	168,600	208,000	33,400	16.05
45	25	200,000	20,800	767,945	811,818	23,073	2.84
46	7	12,000	5,200	124,600	143,762	13,962	9.71
47	20	100,000	12,500	663,847	688,727	12,380	1.80
48	9	100,000	5,400	364,600	384,800	14,800	3.84
49	11	2,000	5,536	12,000	20,000	2,464	12.32
50	8	10,000	6,000	273,900	289,223	9,323	3.22
51	100	400,000	63,611	3,800,835	4,094,960	230,514	5.63
52	75	80,000	28,500	100,000	150,000	21,500	14.33
53	32	75,000	21,000	410,000	480,000	49,000	10.21
54	200	1,000,000	85,000	8,655,090	9,152,800	412,710	4.51
55	40	60,000	28,000	800,000	900,000	72,000	8.00
56	55	25,000	7,410	16,250	25,688	2,028	7.89
57	100	45,000	18,000	65,000	92,500	9,500	10.27
58	10	6,000	7,200	18,000	35,770	10,570	29.55
59	22	6,000	12,000	50,000	70,000	8,000	11.42
60	20	6,000	12,000	26,000	40,000	2,000	5.00
61	10	3,000	6,500	22,000	30,000	1,500	5.00
62	117	350,000	42,555	525,000	850,000	282,445	33.23
63	10	3,000	6,500	42,000	57,200	8,700	15.21
64	50	50,000	15,000	250,000	300,000	35,000	11.67
65	9	25,000	6,552	94,000	105,000	4,448	4.23

FOOD PREPARATIONS — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$6,200	\$7,800	60.00	12.00	12.40	15.60	\$4,545	\$709 00	\$545	11
3,120	—120	62.50	25.00	13.00	—50	1,846	—923 00	461	12
8,100	5,900	73.34	8.00	10.80	7.86	3,750	295 00	300	13
256,776	—63,810	87.64	3.95	11.20	—2.79	11,125	—309 00	438	14
158,500	—140,500	96.44	2.28	11.28	—10.00	17,562	—1,756 00	400	15
8,600	400	70.27	17.57	11.62	.54	4,352	23 00	764	16
3,100	—100	64.00	24.00	12.40	—40	2,272	—9 09	545	17
10,500	—3,300	80.00	10.40	14.00	—4.40	4,687	—206 00	487	18
3,240	760	66.67	20.00	10.80	2.53	3,750	95 00	750	19
2,800	—700	69.60	22.00	11.20	—2.80	2,777	—77 00	611	20
3,390	610	62.50	23.22	12.10	2.18	2,545	55 00	590	21
3,660	4,340	50.00	23.34	12.20	14.46	3,000	434 00	700	22
3,840	2,160	69.45	13.89	10.66	6.00	2,769	166 00	384	23
11,850	—7,050	76.82	18.26	12.15	—7.23	3,250	—235 00	393	24
1,980	2,020	33.34	40.00	13.20	13.46	1,875	252 00	750	25
8,500	29,488	28.58	17.16	12.14	42.12	3,043	1,282 00	522	26
20,500	—10,100	90.29	3.77	11.71	—5.77	8,750	—505 00	330	27
22,800	3,200	82.86	4.76	10.85	1.53	10,000	152 00	476	28
13,700	1,300	74.40	13.60	10.96	1.04	2,976	30 00	404	29
6,340	—293	77.15	11.09	12.33	—57	3,212	—18 00	356	30
7,934	—5,207	82.62	13.67	10.80	—7.10	2,291	—162 00	313	31
11,895	—2,180	78.88	10.89	12.52	—2.29	4,315	—99 00	470	32
12,300	—9,195	91.49	5.79	10.78	—8.06	6,333	—510 00	366	33
29,900	14,025	80.94	3.09	10.87	5.10	18,333	935 00	566	34
44,500	—30,875	95.10	1.50	11.12	—7.72	50,000	—3,859 00	750	35
9,000	27,950	40.64	11.99	11.53	35.84	3,900	1,397 00	467	36
7,200	1,175	66.67	19.38	12.09	1.95	3,000	58 00	581	37
22,000	1,500	74.29	12.29	12.57	.85	4,487	38 00	551	38
4,100	900	68.57	17.15	11.71	2.57	2,916	75 00	500	39
98,730	—58,420	93.82	1.89	10.51	—6.22	31,310	—1,947 00	590	40
135,727	—107,871	94.18	3.68	10.46	—8.32	21,266	—1,768 00	782	41
36,200	—29,800	96.58	1.50	10.90	—8.98	66,400	—5,960 00	1,000	42
105,880	22,972	86.13	.97	10.60	2.30	55,188	1,276 00	540	43
21,400	12,000	81.06	2.89	10.28	5.77	26,000	1,500 00	750	44
93,182	—70,109	94.60	2.56	11.47	—8.63	32,472	—2,804 00	832	45
15,096	—1,134	86.67	3.62	10.50	—79	20,524	—162 00	742	46
74,873	—62,493	96.38	1.82	10.87	—9.07	31,436	—3,124 00	625	47
44,480	—29,680	94.76	1.40	11.55	—7.71	42,755	—3,297 00	600	48
2,120	344	60.00	27.68	10.60	1.72	1,818	31 00	181	49
29,522	—20,199	94.70	2.08	10.20	—6.98	36,152	—2,524 00	750	50
433,496	—202,982	92.82	1.55	10.58	—4.95	40,949	—2,029 00	636	51
19,800	1,700	66.67	19.00	13.20	1.13	2,000	22 00	380	52
52,500	—3,500	85.42	4.37	10.93	—72	15,000	—109 00	656	53
975,280	—562,570	94.56	.93	10.66	—6.15	45,764	—2,812 00	425	54
93,600	—21,600	88.89	3.11	10.40	—2.40	22,500	—540 00	700	55
4,069	—2,041	63.26	28.85	15.84	—7.95	467	—37 00	134	56
11,950	—2,450	70.27	19.46	12.91	—2.64	925	—24 00	180	57
3,937	6,633	50.32	20.13	11.01	18.54	3,577	663 00	720	58
7,360	640	71.43	17.15	10.51	.91	3,181	29 00	545	59
4,360	—2,360	65.00	30.00	10.90	—5.90	2,000	—118 00	600	60
3,180	—1,680	73.33	21.67	10.60	—5.60	3,000	—168 00	650	61
106,000	176,445	61.76	5.01	12.47	20.76	7,264	1,508 00	363	62
5,900	2,800	73.43	11.36	10.31	4.90	5,720	280 00	650	63
33,000	2,000	83.33	5.00	11 00	.67	6,000	40 00	360	64
12,000	—7,552	89.53	6.24	11.42	—7.19	11,666	—839 00	728	65

FOOD PREPARATIONS — Concluded.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
66	30	\$10,000	\$10,000	\$80,000	\$102,000	\$12,000	11.76
67	17	5,000	9,770	36,930	62,400	15,700	25.16
68	15	4,000	5,150	5,000	20,000	9,850	49.25
69	30	3,000	6,875	50,000	65,000	8,125	12.50
70	20	18,000	10,400	5,000	25,000	9,600	38.40

FURNITURE.

1	37	\$15,000	\$13,500	\$17,803	\$38,000	\$6,697	17.62
2	15	10,000	6,000	9,000	19,000	4,000	21.05
3	115	35,000	53,541	35,073	160,171	71,557	44.67
4	50	25,000	14,500	11,600	28,000	1,900	6.78
5	240	125,000	120,000	120,000	260,000	20,000	7.69
6	12	3,000	6,000	2,500	10,000	1,500	15.00
7	91	50,000	39,387	35,000	85,000	10,613	12.48
8	23	20,000	11,537	5,035	17,230	658	3.82
9	14	3,000	5,200	5,000	12,000	1,800	15.00
10	8	1,500	5,500	5,500	12,500	1,500	12.00
11	25	10,000	10,000	14,000	30,000	6,000	20.00
12	55	3,200	25,000	12,000	64,000	27,000	42.18
13	20	1,500	7,000	4,500	30,000	18,500	61.66
14	8	15,000	5,300	12,000	23,000	5,700	24.78
15	17	5,000	10,000	12,500	28,000	5,500	19.64
16	30	34,000	15,000	15,000	40,000	10,000	25.00
17	12	3,500	5,400	2,500	12,000	4,100	34.16
18	15	6,000	7,523	12,000	25,000	5,477	21.90
19	9	18,000	5,000	15,000	25,000	5,000	20.00
20	23	50,000	10,500	45,000	60,000	4,500	7.50
21	15	12,000	5,000	20,000	28,000	3,000	10.71
22	75	20,000	30,000	15,000	60,000	15,000	25.00
23	10	6,500	5,500	4,000	10,500	1,000	9.52
24	32	3,000	15,000	15,000	50,000	20,000	40.00
25	13	1,000	6,700	10,000	23,000	6,300	27.39
26	10	9,000	6,989	8,000	20,000	5,011	25.05
27	20	3,000	10,000	12,000	25,000	3,000	12.00
28	25	5,000	9,341	13,979	36,738	13,418	36.52
29	50	10,000	30,000	100,000	175,000	45,000	25.71
30	12	1,000	9,000	3,000	14,000	2,000	14.28
31	45	30,000	23,106	18,921	62,731	20,704	33.00
32	12	3,000	5,500	6,804	15,103	2,799	18.53
33	40	5,000	15,000	12,000	30,000	3,000	10.00
34	19	13,000	9,178	37,000	46,780	602	1.29
35	10	1,000	7,000	2,000	12,000	3,000	25.00
36	23	9,000	13,300	9,800	28,300	5,200	18.37
37	50	25,000	20,000	27,000	49,000	2,000	4.08
38	16	6,000	10,000	10,000	25,000	5,000	20.00
39	30	40,000	15,000	28,000	51,000	8,000	15.68
40	12	5,000	7,300	20,000	37,000	9,700	26.22
41	10	3,000	7,750	4,000	16,156	4,406	27.27
42	15	100,000	10,000	12,000	22,000	-	-
43	18	6,000	8,550	4,800	25,000	11,650	46.60
44	31	5,000	20,000	15,000	40,000	5,000	12.50
45	15	2,000	8,500	3,500	15,000	3,000	20.00

FOOD PREPARATIONS — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$10,800	\$1,200	78.43	9.81	10.58	1.18	\$3,400	\$400 00	\$333	66
6,540	9,160	59.18	15.66	10.48	14.68	3,670	538 00	574	67
2,240	7,610	25.00	25.75	11.20	38.05	1,333	507 00	343	68
6,680	1,445	76.92	10.58	10.28	2.22	2,166	48 00	229	69
3,580	6,020	20.00	41.60	14.32	24.08	1,250	301 00	520	70

FURNITURE.

\$4,700	\$1,997	46.85	35.53	12.37	5.25	\$1,027	\$53 00	\$364	1
2,500	1,500	47.37	31.58	13.16	7.89	1,266	100 00	600	2
18,117	53,440	21.90	33.43	11.31	33.36	1,392	464 00	465	3
4,300	—2,400	41.43	51.79	15.35	—8.57	560	—48 00	290	4
33,500	—13,500	46.15	46.16	12.88	—5.19	1,083	—56 00	500	5
1,180	320	25.00	60.00	11.80	3.20	833	26 00	500	6
11,500	—887	41.18	46.34	13.52	—1.04	934	—9 74	432	7
2,923	—2,265	29.22	66.96	16.96	—13.14	749	—98 00	501	8
1,380	420	41.67	43.33	11.50	3.50	857	30 00	371	9
1,340	160	44.00	44.00	10.72	1.28	1,562	20 00	687	10
3,600	2,400	46.67	33.33	12.00	8.00	1,200	96 00	400	11
6,592	20,408	18.75	39.07	10.30	31.88	1,163	371 00	454	12
3,090	15,410	15.00	23.34	10.30	51.36	1,500	770 00	350	13
3,200	2,500	52.18	23.04	13.91	10.87	2,875	312 00	662	14
3,100	2,400	44.64	35.72	11.07	8.57	1,647	141 00	588	15
6,040	3,960	37.50	37.50	15.10	9.90	1,333	132 00	500	16
1,410	2,690	20.84	45.00	11.75	22.41	1,000	224 00	450	17
2,860	2,617	48.00	30.10	11.44	10.46	1,666	174 00	501	18
3,580	1,420	60.00	20.00	14.32	5.68	2,777	157 00	555	19
9,000	—4,500	75.00	17.50	15.00	—7.50	2,608	—195 00	456	20
3,520	—520	71.43	17.86	12.57	—1.86	1,866	—34 00	333	21
7,200	7,800	25.00	50.00	12.00	13.00	800	104 00	400	22
1,440	—440	38.10	52.38	13.71	—4.19	1,050	—44 00	550	23
5,180	14,820	30.00	30.00	10.36	29.64	1,562	463 00	468	24
2,360	3,940	43.48	29.13	10.26	17.13	1,769	303 00	515	25
2,540	2,471	40.00	34.95	12.70	12.35	2,000	247 00	698	26
2,680	320	48.00	40.00	10.72	1.28	1,250	16 00	500	27
3,974	9,444	38.05	25.43	10.82	25.70	1,469	377 00	373	28
18,100	26,900	57.15	17.14	10.34	15.37	3,500	538 00	600	29
1,460	540	21.43	64.29	10.42	3.86	1,166	45 00	750	30
8,073	12,631	30.16	36.84	12.86	20.14	1,394	280 00	513	31
1,690	1,109	45.05	36.42	11.19	7.34	1,258	92 00	458	32
3,300	—300	40.00	50.00	11.00	—1.00	750	—7 50	375	33
5,458	—4,856	79.09	19.62	11.67	—10.38	2,462	—255 00	509	34
1,260	1,740	16.67	58.33	10.50	14.50	1,200	174 00	700	35
3,370	1,830	34.63	47.00	11.90	6 47	1,230	79 00	578	36
6,400	—4,400	55.10	40.82	13.06	—8.98	980	—88 00	400	37
2,860	2,140	40.00	40.00	11.44	8.56	1,562	133 00	625	38
7,500	500	54.91	29.41	14.70	.98	1,700	16 00	500	39
4,000	5,700	54.05	19.73	10.81	15.41	3,083	475 00	608	40
1,796	2,610	24 76	47.97	11 12	16.15	1,615	261 00	775	41
8,200	—8,200	54.55	45.45	37.27	—37.27	1,466	—546 00	666	42
2,860	8,790	19 20	34.20	11.44	35.16	1,388	488 00	475	43
4,300	700	37 50	50.00	10.75	1.75	1,290	22 00	645	44
1,620	1,380	23 33	56.67	10.80	9.20	1,000	92 00	566	45

FURNITURE — Concluded.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
46	27	\$10,000	\$8,391	\$55,000	\$75,000	\$11,609	15.48
47	18	10,000	10,800	48,000	75,000	16,200	21.60
48	12	6,000	5,200	35,000	44,958	4,758	10.58
49	25	5,000	18,000	10,000	35,000	7,000	20.00
50	10	3,500		10,000	30,000	3,800	12.66
51	15	20,000	9,100	29,000	44,500	6,400	14.38
52	30	21,000	14,000	65,000	80,000	1,000	1.25
53	8	3,000	5,000	9,920	25,000	10,080	40.32
54	12	8,000	9,000	15,000	35,000	11,000	31.42
55	28	10,000	17,000	40,000	65,000	8,000	12.30
56	15	6,000	11,250	22,800	36,000	1,950	5.42
57	40	25,000	24,000	105,000	150,000	21,000	11.00
58	8	12,000	5,000	26,500	42,000	10,500	25.00
59	13	5,000	7,800	30,000	45,000	7,200	16.00
60	10	5,000	5,000	20,000	30,000	5,000	16.66
61	100	140,000	60,000	125,000	200,000	15,000	7.50
62	10	10,000	5,200	21,000	30,000	3,800	12.66
63	20	8,000	13,500	8,300	25,000	3,200	12.80
64	16	4,000	5,800	38,500	49,500	5,200	10.50
65	60	20,000	26,000	80,000	125,000	19,000	15.20
66	12	1,800	5,200	18,000	25,000	1,800	7.20
67	30	1,200	9,620	1,000	12,000	1,380	11.50
68	16	10,000	7,800	22,000	60,000	30,200	50.33
69	16	2,500	9,000	3,000	16,000	4,000	25.00
70	15	45,000	8,000	62,000	80,000	10,000	12.50
71	50	8,000	20,000	50,000	80,000	10,000	12.50
72	50	10,000	8,550	58,000	68,000	1,450	2.13
73	46	30,000	29,500	28,900	90,000	31,600	35.11
74	75	75,000	31,000	33,000	82,000	18,000	21.95
75	20	3,000	10,000	12,000	23,000	1,000	4.34
76	10	3,000	6,650	18,000	28,050	3,400	12.12
77	11	5,000	5,000	20,000	30,000	5,000	16.16
78	35	15,000	12,000	8,000	30,000	10,000	33.33
79	43	30,000	21,356	15,000	60,000	23,644	39.40
80	58	100,000	17,780	48,013	79,265	13,472	17.00
81	8	2,000	5,500	20,000	30,000	4,500	15.00
82	15	4,000	8,000	7,000	18,000	3,000	16.66
83	16	4,000	7,480	11,600	21,800	2,720	12.47
84	50	10,000	15,000	17,000	48,000	16,000	33.33
85	30	2,000	10,000	11,500	30,000	8,500	28.33
86	12	5,000	7,500	3,000	15,000	4,500	30.00
87	10	4,000	5,000	3,000	10,000	2,000	20.00
88	69	25,000	30,000	50,000	100,000	20,000	20.00
89	100	12,000	42,270	45,000	115,000	27,730	24.11
90	25	7,000	12,000	28,000	45,000	5,000	11.11
91	10	4,500	6,023	11,096	24,065	6,946	28.86
92	12	30,000	9,622	26,500	38,000	1,878	4.94
93	75	25,000	25,000	60,000	90,000	5,000	5.55
94	9	25,000	5,600	12,000	23,000	5,400	23.47
95	84	50,000	35,000	29,000	75,000	11,000	11.66
96	30	15,000	15,000	15,600	38,500	7,900	20.51
97	10	6,000	5,000	5,000	13,000	3,000	23.07
98	7	1,900	5,100	4,200	11,500	2,200	19.13
99	17	9,000	10,000	22,000	43,800	11,800	26.94
100	72	75,000	35,000	50,000	100,000	15,000	15.00

FURNITURE — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$8,100	\$3,509	73.33	11.19	10.80	4.69	\$2,777	\$129 00	\$310	46
8,100	8,100	64.00	14.40	10.80	10.80	4,166	450 00	600	47
4,856	—98	77.85	11.57	10.80	—22	3,746	—8 16	433	48
3,800	3,200	28.57	51.43	10.86	9.14	1,400	128 00	720	49
3,210	590	66.67	20.67	10.70	1.96	3,000	59 00	620	50
5,650	750	65.17	20.45	12.69	1.69	2,966	50 00	606	51
9,260	—8,260	81.25	17.50	11.57	—10.32	2,666	—275 00	466	52
2,680	7,400	39.68	20.00	10.72	29.60	3,125	925 00	625	53
3,980	7,020	42.86	25.72	11.37	20.05	2,916	585 00	750	54
7,100	900	61.54	26.16	10.92	1.38	2,321	32 00	607	55
3,960	—2,010	63.33	31.25	11.00	—5.58	2,400	—134 00	750	56
16,500	4,500	70.00	16.00	11.00	3.00	3,750	112 00	600	57
4,920	5,580	63.10	11.90	11.71	13.29	5,250	697 00	625	58
4,800	2,400	66.67	17.33	10.67	5.33	3,461	184 00	600	59
3,300	1,700	66.67	16.67	11.00	5.66	3,000	170 00	500	60
28,400	—13,400	62.50	30.00	14.20	—6.70	2,000	—134 00	600	61
3,600	200	70.00	17.34	12.00	.66	3,000	20 00	520	62
2,980	220	33.20	54.00	11.92	.88	1,250	11 00	675	63
5,190	10	77.78	11.82	10.48	.02	3,093	62	362	64
13,700	5,300	64.00	20.80	10.96	4.24	2,083	88 00	433	65
2,608	—808	72.00	20.80	10.43	—3.23	2,083	—67 00	433	66
1,272	108	8.33	80.17	10.60	.90	400	3 60	320	67
6,600	23,600	36.67	13.00	11.00	39.33	3,750	1,475 00	487	68
1,750	2,250	18.75	56.25	10.94	14.06	1,000	140 00	562	69
10,700	—700	77.50	10.00	13.37	—87	5,333	—46 00	533	70
8,480	1,520	62.50	25.00	10.60	1.90	1,600	30 00	400	71
7,400	—5,950	85.29	12.58	10.88	—8.75	1,360	—119 00	171	72
10,800	20,800	32.11	32.78	12.00	23.11	1,956	452 00	641	73
12,700	5,300	40.24	37.81	15.49	6.46	1,093	70 00	413	74
2,480	—1,480	52.18	43.48	10.78	—6.44	1,150	—74 00	500	75
2,985	415	64.17	23.71	10.64	1.48	2,805	41 00	665	76
3,300	1,700	66.67	16.67	11.00	5.66	2,727	154 00	454	77
3,900	6,100	26.67	40.00	13.00	20.33	857	174 00	342	78
7,800	15,844	25.00	35.60	13.00	26.40	1,395	368 00	496	79
13,927	—455	60.57	22.43	17.57	—57	1,366	—7 84	306	80
3,120	1,380	67.67	18.33	10.40	4.60	3,750	172 00	687	81
2,040	960	38.89	44.45	11.33	5.33	1,200	64 00	533	82
2,420	300	53.22	34.31	11.10	1.37	1,362	18 00	467	83
5,400	10,600	35.42	31.25	11.25	22.08	960	212 00	300	84
3,120	5,380	38.34	33.33	10.40	17.93	1,000	179 00	333	85
1,800	2,700	20.00	50.00	12.00	18.00	1,250	225 00	625	86
1,240	760	30.00	50.00	12.40	7.60	1,000	76 00	500	87
11,500	8,500	50.00	30.00	11.50	8.50	1,449	123 00	434	88
12,220	15,510	39.13	36.76	10.62	13.49	1,150	155 00	422	89
4,920	80	62.22	26.67	10.93	.18	1,800	320 00	480	90
2,677	4,269	46.11	25.03	11.12	17.14	2,406	426 00	602	91
5,600	—3,722	69.73	25.33	14.73	—13.79	3,166	—310 00	801	92
10,500	—5,500	66.67	27.78	11.66	—6.11	1,200	—73 00	333	93
3,800	1,600	52.18	24.35	16.52	6.95	2,555	177 00	622	94
10,500	500	38.67	46.67	14.00	.66	892	5 95	416	95
4,750	3,150	40.52	38.97	12.33	8.18	1,283	105 00	500	96
1,660	1,340	38.47	38.46	12.76	10.31	1,300	134 00	500	97
1,240	960	36.52	44.35	10.78	8.35	1,642	137 00	728	98
4,920	6,880	50.22	22.84	15.71	11.23	2,576	404 00	588	99
14,500	500	50.00	35.00	14.50	.50	1,388	6 94	486	100

LEATHER.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
1	125	\$150,000	\$15,000	\$192,240	\$141,296	\$204,056	46.24
2	26	10,000	9,000	97,500	121,500	15,000	12.34
3	85	5,000	38,250	177,000	300,000	84,750	28.25
4	39	50,000	24,515	109,660	152,500	18,325	12.01
5	25	18,000	15,000	82,300	119,000	21,700	18.23
6	40	100,000	12,000	40,000	60,000	8,000	13.33
7	100	80,000	42,000	189,600	250,000	18,400	7.36
8	120	50,000	50,000	268,500	346,200	27,700	8.00
9	20	30,000	11,440	41,579	69,132	16,113	23.30
10	16	40,000	10,770	99,094	120,850	10,986	9.09
11	12	4,500	5,250	17,600	28,000	5,150	18.39
12	20	12,000	7,000	53,167	65,430	5,263	8.04
13	185	146,000	73,300	245,600	340,000	21,700	6.38
14	75	59,000	36,400	234,018	351,000	80,582	22.94
15	110	100,000	50,000	257,300	336,940	29,640	8.79
16	32	13,000	12,000	148,000	171,000	11,000	6.43
17	20	15,000	8,143	65,274	82,000	8,583	10.46
18	25	15,000	8,000	50,000	70,000	12,000	17.14
19	40	50,000	20,000	73,500	119,000	25,500	21.43
20	100	75,000	36,000	483,000	612,770	93,770	15.30
21	55	100,000	30,000	153,783	225,000	41,217	18.32
22	13	6,500	6,240	37,817	49,057	5,000	10.19
23	163	150,000	44,148	438,512	521,983	39,323	7.53
24	12	6,500	5,400	17,400	29,000	6,200	21.37
25	20	10,000	7,500	30,000	40,000	2,500	6.25
26	16	8,000	7,200	81,310	92,000	3,490	3.79
27	42	55,000	17,376	82,409	120,000	20,215	16.85
28	31	15,000	10,800	63,700	82,000	7,500	9.14
29	120	232,689	47,078	279,675	400,000	73,247	18.31
30	25	12,000	11,000	85,600	100,000	3,400	3.40
31	30	10,000	12,000	79,000	100,000	9,000	9.00
32	183	120,000	68,650	327,500	435,000	38,850	8.93
33	67	30,000	25,000	175,000	215,000	15,000	6.97
34	93	125,000	43,000	168,000	300,000	89,000	29.67
35	65	75,000	26,000	140,000	172,872	6,872	3.97
36	27	25,000	10,071	35,534	51,700	6,095	11.78
37	96	90,000	31,243	139,550	185,870	15,077	8.11
38	90	125,000	36,000	212,000	276,000	28,000	10.14
39	35	20,000	13,000	150,000	175,000	12,000	6.85
40	254	250,000	117,797	561,656	715,070	35,617	4.98
41	40	75,000	16,000	112,500	149,000	20,500	13.75
42	100	100,000	46,800	228,184	305,704	30,720	10.04
43	30	20,000	12,800	116,925	143,700	13,975	9.72
44	60	45,000	23,045	60,000	164,550	81,505	49.53
45	12	35,000	6,000	32,600	42,000	3,400	8.09
46	19	30,000	6,700	48,700	60,000	4,600	7.66
47	18	39,890	6,812	43,596	56,904	6,496	11.41
48	45	8,000	23,500	82,500	108,000	2,000	1.85
49	40	25,000	20,000	50,500	80,000	9,500	11.87
50	21	8,000	7,000	87,000	108,000	14,000	12.96
51	17	12,000	7,500	65,374	104,000	31,126	29.93
52	22	10,000	8,000	25,000	42,000	9,000	21.43
53	15	15,000	6,000	50,031	61,074	5,043	8.25
54	113	250,000	65,000	343,780	480,000	71,220	14.84
55	40	10,000	22,000	66,030	107,900	19,870	18.41

LEATHER.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$53,130	\$150,926	43.56	10.20	12.04	3.420	\$3,530	\$1,202 00	\$360	1
12,750	2,250	80.25	7.41	10.49	1.85	4,673	86 00	346	2
30,300	54,450	59.00	12.75	10.10	18.15	3,529	640 00	450	3
18,250	75	71.91	16.08	11.97	.04	3,910	192 00	628	4
12,980	8,720	69.16	12.61	10.91	7.32	4,760	348 00	600	5
12,000	—4,000	66.67	20.00	20.00	—6.67	1,500	—100 00	300	6
29,800	—11,400	75.84	16.80	11.92	—4.56	2,500	—114 00	420	7
37,620	—9,920	77.56	14.44	10.86	—2.86	2,885	—82 00	416	8
8,713	7,400	60.15	16.55	12.60	10.70	3,456	370 00	572	9
14,485	—3,499	82.00	8.91	11.98	—2.89	7,553	—218 00	673	10
3,070	2,080	62.86	18.75	10.96	7.43	2,333	173 00	437	11
7,263	—2,000	81.26	10.70	11.10	—3.06	3,271	—100 00	350	12
42,760	—21,060	72.06	21.56	12.57	—6.19	1,837	—113 00	396	13
38,640	41,942	66.67	10.39	11 00	11.94	1,074	559 00	485	14
39,694	10,054	76.37	14.84	11.78	—2.99	3,063	—91 00	454	15
17,880	—6,880	86.55	7.02	10.45	—4.02	5,343	—215 00	375	16
9,100	—517	79.61	9 93	11.09	—6.3	4,100	—25 00	407	17
7,900	4,100	71.43	11.43	11.28	5.86	2,800	164 00	320	18
14,900	10,600	61.76	16.81	12.52	8.91	2,975	265 00	500	19
65,777	27,993	78.82	5.88	10.73	4.57	6,127	279 00	360	20
28,500	12,717	68.35	13.33	12.66	5.66	4,090	229 00	545	21
5,296	—296	77.09	12.72	10.79	—60	3,773	—22 00	480	22
61,198	—21,875	84.01	8.46	11.72	—4.19	3,202	—134 00	271	23
3,290	2,910	60.00	18.62	11.35	10.03	2,416	242 00	450	24
4,600	—2,100	75.00	18.75	11.50	—5 25	2,000	—105 00	375	25
9,680	—6,190	88.38	7.83	10.52	—6.73	5,750	—386 00	450	26
15,300	4,915	68.67	14.48	12.75	4.10	2,857	117 00	413	27
9,100	—1,600	77.69	13.17	11.09	—1.95	2,645	—51 00	348	28
53,961	19,286	69.92	11.77	13.49	4.82	3,333	160 00	392	29
10,720	—7,320	85.60	11.00	10.72	—7.32	4,000	—292 00	440	30
10,600	—1,600	79.00	12.00	10.60	—1 60	3,333	—53 00	400	31
50,700	—11,850	75.29	15.78	11 65	—2.72	2,377	—64 00	375	32
23,300	—8,300	81.40	11.63	10.83	—3.86	3,208	—123 00	373	33
37,500	51,500	56.00	14.33	12.50	17.17	3,225	553 00	462	34
21,787	—14,915	80.99	15.04	12.60	—8.63	2,659	—229 00	400	35
6,670	—575	68.74	19.48	12.90	—1.12	1,914	—21 00	373	36
23,987	—8,910	75 08	16.81	12.90	—4.79	1,936	—92 00	325	37
35,100	—7,100	76.81	13.05	12.71	—2.57	3,066	—78 00	400	38
18,700	—6,700	85.72	7.43	10.68	—3.83	5,000	—191 00	371	39
86,507	—50,890	78.55	16.47	12.09	—7.11	2,815	—200 00	463	40
19,400	1,100	75.51	10.74	13.02	.73	3,725	27 00	400	41
36,570	—5,850	74.65	15.31	11.96	—1.92	3,507	—58 00	468	42
15 570	—1,595	81.37	8.91	10.83	—1.11	4,790	—53 00	426	43
19,155	62,350	36.46	14.01	11.64	37.89	2,742	1,039 00	384	44
6,300	—2,900	77.62	14.29	15.00	—6.91	3,500	—241 00	500	45
7,800	—3,200	81.17	11.17	13.00	—5.34	3,157	—168 00	352	46
8,003	—1,507	76.62	11.97	14.06	—2.65	3,161	—83 00	378	47
11,280	—9,280	76.39	21.76	10.44	—8.59	2,400	—206 00	522	48
9,500	—	63.13	25.00	11 87	—	2,000	—	500	49
11,280	2,720	80.56	6.48	10.44	2.52	3,600	90 00	233	50
11,120	20,006	62.86	7.21	10.69	19.24	6,117	1,176 00	441	51
4,800	4,200	59.52	19.05	11.43	10.00	1,909	190 00	363	52
7,007	—1,964	81.92	9.83	11.47	—3.22	4,071	—130 00	400	53
63,000	8,220	71.62	13.54	13.12	1.72	4,247	72 00	575	54
11,390	8,480	61.20	20.39	10.55	7.86	2,697	212 00	550	55

LEATHER — Continued.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
56	50	\$15,000	\$28,000	\$63,360	\$100,000	\$8,640	8.64
57	30	35,000	15,500	54,900	85,000	14,600	17.17
58	40	20,000	21,099	61,655	91,893	9,139	9.94
59	33	80,000	21,000	87,500	125,000	16,500	13.20
60	103	300,000	62,500	335,250	425,000	27,250	6.41
61	45	50,000	16,800	96,000	120,875	8,075	6.68
62	19	7,000	10,000	18,883	35,000	6,117	17.48
63	78	30,000	35,000	203,200	225,000	—13,200	—5.86
64	45	10,000	20,000	68,800	100,000	11,200	11.20
65	26	35,000	13,000	49,080	70,000	7,920	11.31
66	30	40,500	14,945	67,200	102,204	20,059	19.63
67	8	2,000	5,000	12,150	20,000	2,850	14.25
68	10	7,000	6,000	32,200	45,000	6,800	15.11
69	60	800	36,000	50,500	97,000	10,500	10.83
70	20	30,000	9,000	38,000	55,000	8,000	14.54
71	120	30,000	75,000	325,000	400,000	—	—
72	12	20,000	6,240	56,800	70,000	6,960	9.94
73	40	80,000	18,200	112,250	140,000	9,550	6.82
74	20	9,000	12,000	80,000	100,000	8,000	8.00
75	59	100,000	26,500	176,000	220,000	17,500	7.95
76	64	51,570	32,000	184,500	252,500	36,000	14.26
77	52	60,000	8,376	43,540	60,120	8,204	13.64
78	40	20,000	18,000	12,000	130,000	100,000	76.92
79	40	30,000	22,040	100,000	150,000	27,960	18.64
80	45	25,000	15,000	17,000	150,000	118,000	78.67
81	18	5,000	8,000	5,000	45,000	32,000	71.11
82	15	16,000	7,000	60,000	100,000	33,000	33.00
83	40	40,000	14,000	224,000	250,000	12,000	4.80
84	35	14,000	21,840	4,640	36,067	9,587	26.58
85	20	20,000	19,360	62,400	120,000	38,240	31.87
86	30	7,000	8,375	6,500	35,700	20,825	58.33
87	7	12,000	5,000	20,500	45,000	19,500	43.33
88	25	8,000	15,000	5,500	95,000	74,500	78.42
89	35	50,000	20,000	98,000	120,000	2,000	1.66
90	50	50,000	30,000	171,200	260,000	58,800	22.61
91	20	40,000	12,480	64,250	81,500	4,770	5.86
92	18	2,000	9,450	133,750	150,000	6,800	4.53
93	42	90,000	22,040	103,250	147,000	21,710	14.77
94	80	138,000	49,920	280,174	357,384	27,290	7.64
95	21	40,000	10,000	62,000	74,000	2,000	2.70
96	35	15,000	15,750	82,310	120,000	21,940	18.28
97	20	40,000	12,480	46,000	79,000	20,520	25.97
98	13	6,000	6,500	39,246	49,607	3,861	7.78
99	30	30,000	15,000	79,000	105,000	11,000	10.47
100	20	14,000	10,950	41,460	60,000	7,590	12.65
101	35	30,000	17,500	105,000	120,000	—2,500	—2.08
102	12	7,000	5,000	31,397	45,000	8,603	19.11
103	35	85,000	15,684	107,935	135,000	11,381	8.43
104	18	20,000	10,000	32,950	50,000	7,050	14.10
105	13	500	7,000	80,500	90,000	2,500	2.77
106	60	200,000	30,000	211,500	300,000	55,500	18.50
107	30	20,000	13,500	108,000	144,000	22,500	15.62
108	10	26,000	6,200	29,800	42,000	6,000	14.28
109	16	22,000	7,200	31,761	48,467	9,506	19.62
110	17	25,000	10,200	98,529	109,401	672	.61

LEATHER — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$10,900	—\$2,260	63.36	28.00	10.90	—2.26	\$2,000	—245 00	\$550	56
10,600	4,000	64.59	18.24	12.47	4.70	2,833	133 00	516	57
10,389	—1,250	67.10	22.96	11.30	—1.36	2,297	—31 00	527	58
17,300	—800	70.00	16.80	13.84	—1.64	3,787	—24 00	636	59
60,500	—33,250	78.88	14.71	14.23	—7.82	4,126	—322 00	606	60
15,088	—7,013	79.42	13.90	12.48	—5.80	2,686	—155 00	373	61
3,920	2,197	53.95	28.57	11.20	6.28	1,842	115 00	526	62
24,300	—37,500	90.31	15.55	10.80	—16.66	2,884	—480 00	448	63
10,600	600	68.80	20.00	10.60	.60	2,222	13 00	444	64
9,100	—1,180	70.12	18.57	13.00	—1.69	2,692	—45 00	500	65
12,650	7,409	65.75	14.62	12.38	7.25	3,406	246 00	498	66
2,120	730	60.75	25.00	10.60	3.65	2,500	91 00	625	67
4,920	1,880	71.56	13.33	10.93	4.18	4,500	188 00	600	68
9,748	752	52.06	37.11	10.05	.78	1,616	12 00	600	69
7,300	700	69.09	16.37	13.27	1.27	2,750	35 00	450	70
41,800	—41,800	81.25	18.75	10.45	—10.45	3,333	—348 00	625	71
8,200	—1,240	81.14	8.92	11.71	—1.77	5,833	—103 00	520	72
18,500	—9,250	80.18	13.00	13.42	—6.60	3,500	—231 00	455	73
10,540	—2,540	80.00	12.00	10.54	—2.54	5,000	—127 00	600	74
28,000	—10,500	80.00	12.05	12.72	—4.77	3,728	—177 00	449	75
28,344	7,656	73.07	12.67	11.23	3.03	3,945	119 00	500	76
9,612	—1,408	72.42	13.94	15.98	—2.34	1,156	—27 00	161	77
14,200	85,800	9.23	13.85	10.92	66.00	3,275	2,145 00	450	78
16,800	11,160	66.67	14.69	11.20	7.44	3,750	279 00	551	79
16,500	101,500	11.33	10.00	11.00	67.67	3,333	2,255 00	333	80
4,800	27,200	11.11	17.78	10.67	60.40	2,500	1,511 00	444	81
10,960	22,040	60.00	7.00	10.96	22.04	6,666	1,469 00	466	82
27,400	—15,400	89.60	5.60	10.90	—6.16	6,250	—385 00	350	83
4,447	5,140	12.87	60.55	12.33	14.25	1,030	146 00	624	84
13,200	25,040	52.00	16.13	11.00	20.87	6,000	1,252 00	968	85
3,990	16,835	18.21	23.46	11.17	47.16	1,190	561 00	279	86
5,220	14,280	45.55	11.12	11.60	31.73	6,428	2,040 00	714	87
9,980	64,520	5.79	15.79	10.50	67.92	3,800	2,580 00	600	88
15,000	—13,000	81.67	16.67	12.50	—10.84	3,428	—371 00	571	89
29,000	29,800	65.85	11.54	11.15	11.46	5,200	596 00	600	90
10,550	—5,780	78.83	15.31	12.95	—7.09	4,075	—289 00	624	91
15,120	—8,320	89.17	6.30	10.08	—5.55	8,333	—462 00	525	92
20,100	1,610	70.24	14.99	13.67	1.10	3,500	38 00	524	93
44,018	—16,728	78.39	13.97	12.32	—4.68	4,467	—209 00	624	94
9,800	—7,800	83.79	13.51	13.24	—10.54	3,523	—371 00	476	95
12,900	9,040	68.59	13.13	10.75	7.53	3,428	258 00	450	96
10,300	10,220	58.23	15.80	13.03	12.94	3,950	511 00	624	97
5,321	—1,460	79.12	13.10	10.73	—2.95	3,815	—112 00	500	98
12,300	—1,300	75.24	14.29	11.71	—1.24	3,500	—43 00	500	99
6,840	750	69.10	18.25	11.40	1.25	3,000	37 00	547	100
13,800	—16,300	87.50	14.58	11.50	—13.58	3,428	—465 00	500	101
4,920	3,683	69.78	11.11	10.93	8.18	3,750	306 00	416	102
18,600	—7,219	79.95	11.62	13.77	—5.34	3,857	—206 00	448	103
6,200	850	65.90	20.00	12.40	1.70	2,777	47 00	555	104
9,030	—6,530	89.45	7.78	10.03	—7.26	6,923	—502 00	538	105
42,000	13,500	71.50	10.00	14.00	4.50	5,000	225 00	500	106
15,600	6,900	75.01	9.37	10.83	4.79	4,800	230 00	450	107
5,760	240	70.96	14.76	13.71	.57	4,200	24 00	620	108
6,167	3,339	65.53	14.85	12.74	6.88	3,029	208 00	450	109
12,440	—11,768	90.06	9.33	11.37	—10.76	6,435	—692 00	600	110

LEATHER — Concluded.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
111	25	\$20,000	\$12,500	\$67,500	\$90,000	\$10,000	11.11
112	54	85,000	23,400	206,000	235,000	5,600	2.38
113	14	7,500	6,552	94,100	140,000	39,348	28.10
114	31	10,000	15,317	117,969	140,000	6,714	4.79
115	12	1,000	6,250	112,000	120,000	1,750	1.45
116	18	7,500	8,615	67,546	90,902	14,741	16.22
117	40	50,000	27,300	107,500	162,500	27,700	17.04
118	20	7,000	5,000	5,000	11,000	1,000	9.09
119	14	10,000	7,000	15,000	25,000	3,000	12.00
120	20	24,000	12,000	63,000	85,000	10,000	11.76
121	55	75,000	20,263	71,502	104,347	12,582	12.05
122	30	10,000	9,500	88,000	107,333	9,833	9.16
123	15	2,500	6,000	14,000	22,000	2,000	9.09
124	17	20,000	10,500	70,000	90,000	9,500	10.55
125	29	16,000	11,000	48,250	65,000	5,750	8.84
126	23	20,000	10,000	75,000	100,000	15,000	15.00
127	12	15,000	5,135	37,255	46,601	4,211	9.03
128	118	150,000	56,415	391,378	487,642	39,849	8.17
129	30	25,000	11,264	114,434	150,000	24,302	16.20
130	21	4,000	18,720	320,000	400,000	61,280	15.32
131	17	20,000	8,586	38,507	50,000	2,907	5.81
132	18	25,000	8,480	47,630	59,000	2,890	4.89
133	10	10,000	6,000	26,100	35,000	2,900	8.28
134	15	3,000	7,000	23,300	33,675	3,375	10.02
135	50	50,000	20,000	245,500	275,500	10,000	3.62
136	40	37,000	17,000	184,125	206,625	5,500	2.66
137	13	12,000	7,000	32,000	41,000	2,000	4.87
138	23	1,000	7,000	81,750	104,700	15,950	15.23
139	75	25,000	18,935	170,000	211,958	23,023	10.86
140	24	8,000	11,440	79,000	100,000	9,560	9.56
141	35	7,500	20,000	100,000	126,000	6,000	4.76
142	7	12,000	5,564	60,000	80,000	14,436	18.04
143	15	30,000	8,000	10,000	25,000	7,000	28.00
144	18	18,000	9,000	90,000	110,000	11,000	10.00
145	12	20,000	5,000	120,000	132,000	7,000	5.30
146	20	15,000	6,000	25,000	35,000	4,000	11.42
147	30	1,500	5,500	20,000	35,000	9,500	27.14
148	23	198,000	13,189	219,000	254,000	21,811	8.58
149	30	8,000	12,000	1,500	17,500	4,000	22.85
150	70	8,000	26,000	3,840	32,850	3,010	9.16
151	18	5,000	6,000	18,000	30,000	6,000	20.00
152	200	700,000	90,000	500,000	800,000	210,000	26.25
153	22	5,000	8,000	5,500	16,350	2,850	17.42
154	50	50,000	28,600	361,440	429,000	38,960	9.08
155	22	17,000	11,440	56,590	74,390	6,360	8.54
156	10	5,000	5,588	13,488	23,244	4,168	17.93
157	25	15,000	12,000	8,000	25,000	5,000	20.00
158	20	15,000	18,000	9,000	35,000	8,000	22.85
159	13	10,000	5,200	1,200	10,000	3,600	36.00
160	18	40,000	9,000	7,000	25,000	9,000	36.00

LEATHER — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$10,200	—\$200	75.00	13.89	11.33	—22	\$3,600	—\$800 00	\$500	111
28,600	—23,000	87.66	9.96	12.17	—9.79	4,351	—425 00	433	112
14,450	24,898	67.22	4.68	10.32	17.78	10,000	1,778 00	468	113
14,600	—7,886	84.27	10.94	10.42	—5.63	4,516	—254 00	494	114
12,060	—10,310	93.34	5.21	10.05	—8.60	10,000	—859 00	520	115
9,540	5,201	74.30	9.48	10.49	5.73	5,050	288 00	478	116
19,250	8,450	66.16	16.80	11.84	5.20	5,062	211 00	682	117
1,520	—520	45.46	45.45	13.81	—4.72	550	—26 00	250	118
3,100	—100	60.00	28.00	12.40	—40	1,785	—7 14	500	119
9,940	60	74.12	14.12	11 69	.07	4,250	3 00	600	120
14,935	—2,353	68.53	19.42	14.31	—2.26	1,897	—42 00	368	121
11,333	—1,500	81.99	8.85	10.55	—1.39	3,577	—50 00	316	122
2,350	—350	63.64	27.27	10.68	—1.59	1,466	—23 00	400	123
10,200	—700	77.78	11.67	11.33	—78	5,294	—41 00	617	124
7,460	—1,710	74.24	16.92	11.47	—2.63	2,241	—58 00	379	125
11,200	3,800	75.00	10.00	11.20	3.80	4,347	165 00	434	126
5,560	—1,349	79.95	11.02	11.93	—2.90	3,883	—112 00	427	127
57,764	—17,915	80.26	11 57	11.84	—3.67	4,132	—151 00	478	128
16,500	7,802	76.29	7.51	11.00	5.20	5,000	260 00	375	129
40,240	21,040	80.00	4.68	10.06	5.26	19,047	1,001 00	891	130
6,200	—3,293	77.02	17.17	12.40	—6.59	2,941	—134 00	505	131
7,400	—4,510	80.73	14.38	12.54	—7.65	3,277	—250 00	471	132
4,100	—1,200	74 57	17.15	11.71	—3.43	3,500	—120 00	600	133
3,548	—173	69.19	20.79	10.53	—51	2,245	—11 00	466	134
30,550	—20,550	89.12	7.26	11.08	—7.46	5,510	—411 00	400	135
22,883	—17,383	89.12	8.22	11.07	—8.41	5,165	—434 00	425	136
4,820	—2,820	78.05	17.08	11.75	—6.88	3,153	—216 00	538	137
10,530	5,420	78.08	6.69	10.05	5.18	4,532	235 00	304	138
22,696	327	80.21	8.93	10.70	.16	2,826	4 36	252	139
10,480	—920	79.00	11.44	10.48	—92	4,166	—38 00	476	140
13,050	—7,050	79.37	15.87	10.35	—5.59	3,600	—201 00	571	141
8,720	5,716	75.00	6 96	10 90	7.14	11,428	817 00	795	142
4,300	2,700	40.00	32.00	17.20	10.80	1,666	180 00	533	143
12,080	—1,080	81.82	8.18	10.98	—98	6,111	—60 00	500	144
14,400	—7,400	90.91	3.79	10.90	—5.60	11,000	—617 00	417	145
4,400	—400	71.43	17.15	12.57	—1.15	1,750	—20 00	300	146
3,590	5,910	57.15	15.71	10.25	16.89	1,166	197 00	183	147
37,280	—15,469	86.23	5.19	14.67	—6.09	11,043	—672 00	573	148
2,230	1,770	8.58	68.57	12 74	10.11	583	59 00	400	149
3,765	—755	11.69	79.15	11.46	—2.30	469	—10 00	371	150
3,300	2,700	60.00	20.00	11.00	9.00	1,666	150 00	333	151
122,000	88,000	62 50	11.25	15.25	11 00	4,000	440 00	400	152
1,935	915	33.64	48.94	11.83	5.59	743	41 00	363	153
45,900	—6,940	84.25	6.67	10.69	—1.61	8,580	—138 00	572	154
8,459	—2,099	76.08	15 38	11.37	—2.83	3,381	—95 00	520	155
2,624	1,544	58.03	24.04	11.28	6.65	2,324	154 00	558	156
3,400	1,600	32.00	48 00	13.60	6.40	1,000	64 00	480	157
4,400	3,600	25.72	54.43	12 57	10.28	1,750	180 00	900	158
1,600	2,000	12 00	52.00	16.00	20.00	769	153 00	400	159
4,900	4,100	28.00	36.00	19.60	16.40	1,388	227 00	500	160

MACHINES AND MACHINERY.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
1	10	\$40,000	\$6,000	\$9,120	\$33,500	\$18,380	54.87
2	18	6,000	8,292	42,000	53,000	2,708	5.11
3	135	65,000	80,322	240,790	338,790	17,678	5.21
4	12	500	7,000	5,000	15,000	3,000	20.00
5	188	150,000	56,322	70,225	152,906	26,329	17.21
6	14	40,000	7,900	23,000	34,000	3,100	9.11
7	20	45,000	9,000	18,000	43,000	16,000	37.21
8	32	8,000	10,603	16,000	37,600	10,997	29.24
9	20	15,000	10,000	12,000	30,000	8,000	26.67
10	10	15,000	6,150	5,600	15,500	3,750	24.19
11	1,145	600,000	583,000	514,000	1,290,000	193,000	14.96
12	90	50,000	40,596	150,000	240,000	49,404	20.58
13	35	50,000	14,000	30,000	55,000	11,000	20.00
14	26	20,000	11,498	33,707	48,581	3,376	6.94
15	16	9,500	6,000	12,000	22,500	4,500	20.00
16	17	25,000	9,880	20,000	70,000	40,120	57.31
17	12	20,000	7,340	59,850	81,090	13,900	17.14
18	16	20,000	8,400	7,200	19,250	3,650	18.96
19	22	24,860	8,424	8,100	21,600	5,076	23.50
20	130	50,000	58,500	26,750	87,369	2,119	2.42
21	19	2,000	5,000	2,000	10,000	3,000	30.00
22	19	2,000	6,000	3,500	15,000	5,500	36.66
23	47	17,000	30,000	3,700	37,000	3,300	8.91
24	10	3,000	6,000	1,000	10,000	3,000	40.00
25	70	12,000	19,000	28,000	55,000	8,000	14.54
26	20	7,500	12,600	2,000	38,000	23,400	61.57
27	12	9,000	8,000	10,000	25,000	7,000	28.00
28	31	40,000	16,425	18,980	39,713	4,308	10.84
29	19	15,000	7,500	6,500	18,000	4,000	22.22
30	17	10,000	5,000	10,000	16,000	1,000	6.25
31	43	50,000	17,121	19,200	41,500	5,179	12.48
32	12	30,000	9,300	56,000	75,000	9,700	12.93
33	12	20,000	6,000	6,000	18,000	6,000	33.33
34	12	16,000	6,300	5,150	14,910	3,460	23.20
35	252	125,000	113,402	174,059	343,279	55,818	16.26
36	46	25,000	16,342	17,000	50,000	16,658	33.31
37	12	5,000	6,000	9,000	20,000	5,000	25.00
38	14	20,000	6,200	26,912	41,500	8,388	20.21
39	30	25,000	10,400	11,500	35,000	13,100	37.42
40	18	25,000	10,400	11,000	30,000	8,600	28.66
41	12	5,000	7,000	10,000	20,000	3,000	15.00
42	18	12,000	11,000	8,000	23,000	4,000	17.39
43	518	350,000	235,000	250,000	527,000	42,000	7.97
44	8	7,000	5,700	3,000	28,000	19,300	68.92
45	8	8,000	5,000	10,000	18,000	3,000	16.66
46	10	10,000	5,000	20,000	26,500	1,500	5.66
47	8	10,000	5,000	5,000	20,000	10,000	50.00
48	52	30,000	20,000	28,000	50,000	2,000	4.00
49	39	25,000	11,496	9,375	27,000	6,129	22.70
50	18	30,000	10,268	8,300	21,000	2,432	11.58
51	27	15,000	10,000	9,000	25,000	6,000	24.00
52	90	54,000	18,647	12,000	39,200	8,553	21.81
53	22	10,000	6,350	2,600	16,000	7,050	44.06
54	125	113,455	39,220	77,522	129,707	12,965	9.99
55	35	20,000	11,400	9,100	30,000	9,500	31.66

MACHINES AND MACHINERY.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used or value of product.	Percentage of wages paid or value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$5,750	\$12,630	27.22	17.91	17.17	37.70	\$3,350	\$1,263 00	\$600	1
5,660	—2,952	79.24	15.65	10.68	—5.57	2,944	—164 00	460	2
37,779	—20,101	71.08	23.71	11.15	—5.94	2,509	—148 00	594	3
1,530	1,170	33.33	46.67	10.20	9.80	1,250	122 00	583	4
24,291	2,038	45.95	36.84	15.88	1.33	813	10 00	299	5
5,800	—2,700	67.65	23.24	17.06	—7.95	2,428	—192 00	564	6
7,000	9,000	41.86	20.93	16.28	20.93	2,150	450 00	450	7
4,240	6,757	42.56	28.20	11.27	17.97	1,175	211 00	331	8
3,900	4,100	40.00	33.33	13.00	13.67	1,500	205 00	500	9
2,450	1,300	36.13	39.68	15.80	8.39	1,550	130 00	615	10
165,000	28,000	39.85	45.19	12.79	2.17	1,126	24 00	509	11
27,000	22,404	62.50	16.92	11.25	9.33	2,666	248 00	451	12
8,500	2,500	54.55	25.45	15.45	4.55	1,571	71 00	400	13
6,058	—2,682	69.38	23.67	12.47	—5.52	1,868	—103 00	442	14
2,820	1,680	53.33	26.67	12.53	7.47	1,406	105 00	375	15
8,500	31,620	28.57	14.12	12.14	45.17	4,117	1,860 00	581	16
9,309	4,591	73.81	9.05	11.48	5.66	6,757	382 00	611	17
3,125	525	37.40	43.64	16.23	2.73	1,203	32 00	525	18
3,652	1,424	37.50	39.00	16.91	6.59	981	64 00	382	19
11,737	—9,618	30.62	66.96	13.43	—11.01	672	—73 00	450	20
1,120	1,880	20.00	50.00	11.20	18.80	526	98 00	233	21
1,620	3,880	23.34	40.00	10.80	25.86	789	204 00	315	22
4,720	—1,420	10.00	81.09	12.75	—3.84	787	—30 00	638	23
1,180	1,820	10.00	60.00	11.80	18.20	1,000	182 00	600	24
6,220	1,780	50.91	34.55	11.30	3.24	785	25 00	271	25
4,250	19,150	5.27	33.16	11.18	50.39	1,900	957 00	630	26
3,040	3,960	40.00	32.00	12.16	15.84	2,083	330 00	666	27
6,371	—2,063	47.80	41.36	16.04	—5.20	1,281	—66 00	529	28
2,700	1,300	36.11	41.67	15.00	7.22	947	68 00	394	29
2,200	—1,200	62.50	31.25	13.75	—7.50	941	—70 00	294	30
7,150	—1,971	46.26	41.26	17.22	—4.74	965	—45 00	398	31
9,300	400	74.67	12.40	12.40	.53	6,250	33 00	775	32
3,000	3,000	33.34	33.33	16.66	16.67	1,500	250 00	500	33
2,451	1,009	34.54	42.26	16.44	6.76	1,242	84 00	525	34
41,828	13,990	50.71	23.03	12.18	4.08	1,362	55 00	450	35
6,500	10,158	34.00	32.69	13.00	20.31	1,086	220 00	355	36
2,300	2,700	45.00	30.00	11.50	13.50	1,666	225 00	500	37
5,350	3,038	64.85	14.91	12.89	7.32	2,964	217 00	442	38
5,000	8,100	32.86	29.72	14.28	23.14	1,166	270 00	346	39
4,500	4,100	36.67	34.67	15.00	13.66	1,666	227 00	577	40
2,300	700	50.00	35.00	11.50	3.50	1,666	58 00	583	41
3,020	980	34.78	47.83	13.13	4.26	1,277	54 00	611	42
73,700	—31,700	47.44	44.59	13.98	—6.01	1,017	—61 00	453	43
3,220	16,080	10.72	20.36	11.50	57.42	3,500	2,010 00	712	44
2,280	720	55.56	27.78	12.66	4.00	2,250	90 00	625	45
3,250	—1,750	75.47	18.87	12.26	—6.60	2,650	—175 00	500	46
2,600	7,400	25.00	25.00	13.00	37.00	2,500	925 00	625	47
6,800	—4,800	56.00	40.00	13.60	—9.60	961	—92 00	384	48
4,200	1,929	34.72	42.58	15.56	7.14	692	49 00	294	49
3,900	—1,468	39.52	48.90	18.57	—6.99	1,166	—81 00	570	50
3,400	2,600	36.00	40.00	13.60	10.40	925	96 00	370	51
7,160	1,393	30.62	47.57	18.26	3.55	435	15 00	207	52
2,200	4,850	16.25	39.69	13.75	30.31	727	220 00	288	53
19,778	—6,813	59.77	30.24	15.24	—5.25	1,937	—54 00	313	54
4,200	5,300	30.34	38.00	14.00	17.66	857	151 00	325	55

MACHINES AND MACHINERY — Continued.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
56	18	\$3,000	\$6,000	\$10,000	\$19,000	\$3,000	15.78
57	327	218,500	222,678	466,256	729,263	40,329	5.53
58	550	600,000	287,000	223,000	551,000	41,000	7.44
59	20	10,000	5,000	5,000	12,000	2,000	16.66
60	127	125,000	65,458	57,167	168,074	45,449	27.04
61	24	6,500	7,200	1,400	11,800	3,200	27.12
62	35	11,000	14,965	12,000	48,000	21,035	43.82
63	40	10,000	7,040	40,842	48,356	474	.98
64	48	75,000	9,406	8,500	22,130	4,224	19.09
65	15	4,000	7,143	2,500	10,000	357	3.57
66	300	150,000	150,000	125,000	325,000	50,000	15.38
67	70	100,000	27,000	29,000	80,000	24,000	30.00
68	50	50,000	16,000	30,000	90,000	44,000	48.88
69	15	50,000	9,000	4,000	18,000	5,000	27.77
70	9	5,000	5,400	1,100	8,125	1,625	20.00
71	20	60,000	14,350	34,000	60,000	11,650	19.41
72	34	20,000	22,500	12,000	45,000	10,500	23.33
73	50	20,000	32,000	21,000	60,000	7,000	11.67
74	24	20,000	13,702	21,069	43,000	8,229	19.13
75	75	120,000	40,346	48,000	94,300	5,954	6.31
76	32	30,000	17,500	33,200	57,900	7,200	12.43
77	10	4,000	5,000	4,000	12,500	3,500	28.00
78	38	15,000	11,440	25,000	37,000	560	1.51
79	250	200,000	113,700	86,500	245,700	45,500	18.51
80	70	300,000	39,387	38,275	117,567	39,905	33.94
81	25	150,000	11,596	6,700	50,000	31,704	63.40
82	27	25,000	10,670	27,000	50,000	12,330	24.66
83	50	10,000	12,000	10,000	30,000	8,000	26.66
84	75	75,000	30,000	23,000	84,500	31,500	37.27
85	53	30,000	23,520	15,980	49,650	10,150	20.44
86	155	606,546	87,098	129,179	279,503	63,226	22.62
87	32	75,000	15,000	45,000	75,000	15,000	20.00
88	12	5,000	7,000	3,000	10,500	500	4.76
89	8	3,000	6,500	2,500	14,900	5,900	39.59
90	350	300,000	240,000	240,000	480,000	-	-
91	10	6,000	7,000	5,000	18,000	6,000	33.33
92	8	8,000	5,200	5,000	15,000	4,800	32.00
93	100	100,987	72,976	97,770	184,467	13,721	7.44
94	20	200,000	12,000	30,000	65,000	23,000	35.38
95	20	10,000	10,590	2,191	17,442	4,661	26.72
96	9	5,000	8,000	5,028	17,250	4,222	24.47
97	65	75,000	36,000	45,000	100,000	19,000	19.00
98	8	5,000	5,200	2,600	12,000	4,200	35.00
99	100	335,000	66,267	104,702	218,200	47,231	21.64
100	12	10,000	7,456	7,431	20,237	5,350	26.43
101	85	30,000	33,700	35,000	80,000	11,300	14.12
102	26	18,000	12,000	45,000	71,000	14,000	19.72
103	15	20,000	11,500	15,500	29,100	2,100	7.21
104	15	40,000	9,000	60,000	120,000	51,000	42.50
105	10	8,000	6,240	2,400	11,500	2,860	24.87
106	15	15,000	11,700	4,000	20,000	4,300	21.50
107	9	18,000	6,558	3,270	20,700	10,872	52.51
108	35	30,000	15,863	79,370	100,000	4,767	4.76
109	45	65,000	21,300	26,650	66,700	18,750	28.11
110	75	100,000	45,000	10,000	50,000	-5,000	-10.00

MACHINES AND MACHINERY — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$2,080	8920	52.64	31.58	10.94	4.84	99,1055	\$951 00	\$9333	56
86,036	—45,707	63.94	30.53	11.79	—6.26	2,230	—139 00	680	57
91,100	—50,100	40.47	52.09	16.53	—9.09	1,001	—91 00	521	58
1,800	200	41.67	41.67	15.00	1.66	600	10 00	250	59
24,307	21,142	34.01	38.95	14.46	12.58	1,323	166 00	515	60
1,570	1,630	11.86	61.02	13.31	13.81	491	67 00	300	61
5,460	15,575	25.00	31.18	11.37	32.45	1,371	445 00	427	62
5,436	—4,962	84.46	14.56	11.24	—10.26	1,208	—124 00	176	63
6,713	—2,489	38.41	42.50	30.33	—11.24	461	—51 00	195	64
1,240	—883	25.00	71.43	12.40	—8.83	666	—58 00	476	65
41,500	8,500	38.46	46.16	12.77	2.61	1,083	28 00	500	66
14,000	10,000	36.25	33.75	17.50	12.50	1,142	142 00	385	67
12,000	32,000	33.34	17.78	13.33	35.55	1,800	640 00	320	68
4,800	200	22.23	50.00	26.66	1.11	1,200	13 00	600	69
1,113	512	13.54	66.46	13.70	6.30	902	56 00	600	70
9,600	2,050	56.67	23.92	16.00	3.41	3,000	102 00	717	71
5,700	4,800	26.67	50.00	12.66	10.67	1,323	141 00	616	72
7,200	—200	35.00	53.33	12.00	—33	1,200	—4 00	640	73
5,500	2,729	49.00	31.87	12.79	6.34	1,791	113 00	570	74
16,630	—10,676	50 90	42.79	17.63	—11.32	1,257	—142 00	537	75
7,590	—390	57.34	30.23	13.10	—67	1,809	—12 00	546	76
1,490	2,010	32.00	40.00	11.92	16.08	1,250	201 00	500	77
4,600	—4,040	67.57	30.92	12.43	—10.92	973	—106 00	301	78
36,570	8,930	35.21	46.28	14.88	3.63	982	35 00	454	79
29,757	10,148	32.56	33.50	25.31	8 63	1,679	144 00	562	80
14,000	17,704	13.40	23.20	28.00	35.40	2,000	708 00	463	81
6,500	5,830	54.00	21.34	13.00	11.66	1,851	215 00	395	82
3,600	4,400	33.34	40.00	12.00	14.66	600	88 00	240	83
12,950	18,550	27.22	35.51	15.32	21 95	1,126	247 00	400	84
6,765	3,385	32 19	47.37	13.62	6.82	936	63 00	443	85
64,343	—1,117	46.22	31.16	23.02	—40	1,803	—7 20	561	86
12,000	3,000	60.00	20 00	16.00	4.00	2,343	93 00	468	87
1,350	—850	28.57	66.67	12.85	—8.09	875	—70 00	583	88
1,670	4,230	16.78	43.63	11.20	28.39	1 862	528 00	812	89
66,000	—66,000	50.00	50.00	13.75	—13.75	1,371	—188 00	685	90
2,160	3,840	27.78	38.89	12.00	21.33	1,800	384 00	700	91
1,980	2,820	33.33	34.67	13.20	18.80	1,875	352 00	650	92
24,506	—10,785	53.00	39 56	13.28	—5.84	1,844	—107 00	729	93
18,500	4,500	46.16	18.46	28.46	6.92	3,250	225 00	600	94
2,344	2,317	12.56	60 72	13.44	13.28	872	115 00	529	95
2,025	2,197	29.15	46.38	11.74	12.73	1,916	244 00	888	96
14,500	4,500	45.00	36.00	14.50	4.50	1,538	69 00	553	97
1,500	2,700	21.67	43.33	12.50	22.50	1,500	337 00	650	98
41,920	5,311	47.99	30.37	19.21	2.43	2,182	53 00	662	99
2,624	2,726	36.72	36.85	12.86	13.47	1,686	227 00	621	100
9,800	1,500	43.75	42.13	12.25	1.87	941	17 00	396	101
8,180	5,820	63.38	16 90	11.52	8.20	2,730	223 00	461	102
4,110	—2,010	53.27	39.52	14.12	—6.91	1,940	—134 00	766	103
14,400	36,600	50.00	7.50	12.00	30.50	8,000	2,440 00	600	104
1,630	1,230	20.87	54.26	14.17	10.70	1,150	123 00	624	105
2,900	1,400	20.00	58.50	14.50	7.00	1,333	93 00	780	106
3,150	7,722	15.80	31 69	15.21	37.30	2,300	858 00	728	107
11,800	—7,033	79.37	15.87	11.80	—7.04	2,857	—200 00	453	108
10,570	8,180	39.96	31.93	15 84	12.27	1,482	181 00	473	109
11,000	—16,000	20.00	90.00	22.00	—32.00	666	—213 00	600	110

MACHINES AND MACHINERY — Concluded.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
111	16	\$50,000	\$10,000	\$1,000	\$50,000	\$39,000	78.00
112	10	10,000	7,000	3,873	19,000	8,127	42.77
113	18	8,000	10,500	4,000	20,000	5,500	27.50
114	10	7,000	7,500	2,100	11,890	2,290	19.26
115	12	5,000	9,560	3,750	14,746	1,436	9.74
116	15	5,000	7,000	5,000	15,000	3,000	20.00
117	16	20,000	6,500	10,000	22,000	5,500	25.00
118	8	5,000	6,000	1,600	9,000	1,400	15.55
119	30	25,000	15,600	30,000	60,000	14,400	24.00
120	118	10,000	46,335	224,638	382,306	111,333	29.12
121	12	25,000	10,800	3,600	17,000	2,600	15.29
122	30	50,000	16,500	30,000	56,000	9,500	16.96
123	18	2,500	12,000	3,000	18,000	3,000	16.66
124	12	7,000	10,000	3,000	15,000	2,000	13.33
125	8	10,000	6,000	2,000	16,000	8,000	50.00
126	10	5,000	5,460	7,000	15,400	2,940	19.09
127	300	500,000	152,020	275,294	769,042	341,728	44.43
128	125	100,000	65,000	80,000	200,000	55,000	27.50
129	155	150,000	93,347	209,825	364,574	61,402	16.84
130	18	8,000	5,000	4,800	10,000	200	2.00
131	45	35,000	20,717	65,020	86,336	599	.69
132	265	484,101	152,628	60,000	299,265	86,637	28.95
133	60	15,000	30,000	32,000	70,317	8,317	11.83
134	21	80,000	12,000	70,000	100,000	18,000	18.00
135	51	200,000	40,000	350,000	454,187	64,187	14.13
136	150	150,000	100,000	80,000	213,000	33,000	15.49
137	760	700,000	295,500	410,500	850,500	144,500	16.99
138	75	100,000	45,000	100,000	173,500	28,500	16.42
139	170	500,000	96,000	145,000	450,000	209,000	46.44
140	40	60,000	26,600	45,000	90,000	18,400	20.44
141	200	75,000	75,250	170,230	323,450	77,970	24.10
142	200	140,000	100,000	80,000	200,000	20,000	10.00
143	50	50,000	25,000	25,000	60,000	10,000	16.66
144	120	45,000	40,000	100,000	170,000	30,000	17.64
145	561	200,000	180,000	90,000	300,000	30,000	10.00
146	56	21,000	29,500	40,500	108,000	38,000	35.18
147	44	45,000	16,092	30,000	61,500	15,408	25.05
148	44	180,000	32,000	169,000	212,000	11,000	5.18
149	325	425,000	167,167	350,000	621,517	104,350	16.79
150	12	15,000	6,500	4,000	22,000	11,500	52.27

METALS AND METALLIC GOODS.

1	25	\$15,000	\$8,000	\$10,000	\$20,000	\$2,000	10.00
2	20	12,000	8,690	14,042	24,872	2,140	8.60
3	100	15,000	42,000	80,000	140,000	18,000	12.85
4	40	30,000	19,800	45,000	70,000	5,200	7.42
5	12	6,500	5,000	1,500	8,000	1,500	18.75
6	30	40,000	12,154	9,446	23,000	1,400	6.08
7	196	85,000	83,000	126,000	240,000	31,000	12.92
8	145	100,000	58,000	67,000	138,000	13,000	9.12
9	100	175,000	64,000	366,100	460,000	29,900	6.50
10	10	20,000	6,600	6,000	13,800	1,200	8.69

MACHINES AND MACHINERY — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$8,000	\$31,000	2.00	20.00	16.00	62.00	\$3,125	\$1,937 00	\$625	111
2,500	5,627	20.39	36.84	13.15	29.62	1,900	562 00	700	112
2,480	3,020	20.00	52.50	12.40	15.10	1,111	167 00	583	113
1,609	681	17.66	63.08	13.53	5.73	1,189	68 00	750	114
1,775	—339	25.43	64.83	12.03	—2.29	1,228	—28 00	796	115
1,800	1,200	33.33	46.67	12.00	8.00	1,000	80 00	466	116
3,400	2,100	45.45	29.55	15.45	9.55	1,375	131 00	406	117
1,200	200	17.78	66.67	13.33	2.22	1,125	25 00	750	118
7,500	6,900	50.00	26.00	11.50	12.50	2,000	230 00	520	119
38,831	72,502	58.76	12.12	10.15	18.97	3,239	614 00	392	120
3,200	—600	21.18	63.53	18.82	—3.53	1,416	—50 00	900	121
8,600	900	53.57	29.47	15.35	1.61	1,866	30 00	550	122
1,950	1,050	16.67	66.67	10.83	5.83	1,000	58 00	666	123
1,920	80	20.00	66.67	12.80	.53	1,250	6 66	833	124
2,200	5,800	12.50	37.50	13.75	36.25	2,000	725 00	750	125
1,840	1,100	45.46	35.45	11.94	7.15	1,540	110 00	546	126
106,904	234,824	35.80	19.77	13.90	30.53	2,563	782 00	506	127
26,000	29,000	40.00	32.50	13.00	14.50	1,600	232 00	520	128
45,457	15,945	57.55	25.61	12.46	4.38	2,352	102 00	602	129
1,480	—1,280	48.00	50.00	14.80	—12.80	555	—71 00	277	130
10,734	—10,135	75.31	24.00	12.43	—11.74	1,918	—225 00	460	131
58,973	27,664	20.05	51.00	19.71	9.24	1,129	104 00	575	132
7,932	385	45.50	42.67	11.28	.55	1,171	6 41	500	133
14,800	3,200	70.00	12.00	14.80	3.20	4,761	152 00	571	134
57,419	6,768	77.06	8.81	12.64	1.49	8,905	132 00	784	135
30,300	2,700	37.56	46.95	14.22	1.27	1,420	18 00	666	136
127,050	17,450	48.27	34.74	14.94	2.05	1,119	22 00	388	137
23,350	5,150	57.64	25.94	13.45	2.97	2,313	68 00	600	138
75,000	134,000	32.22	21.34	16.67	29.77	2,647	788 00	564	139
12,600	5,800	50.00	29.56	14.00	6.44	2,250	145 00	665	140
36,845	41,125	52.63	23.27	11.39	12.71	1,617	205 00	376	141
28,400	—8,400	40.00	50.00	14.20	—4.20	1,000	—42 00	500	142
9,000	1,000	41.67	41.67	15.00	1.66	1,200	50 00	500	143
19,700	10,300	58.83	23.53	11.58	6.06	1,416	85 00	333	144
42,000	—12,000	30.00	60.00	14.00	—4.00	534	—21 00	320	145
12,060	25,940	37.50	27.32	11.16	24.02	1,928	463 00	526	146
8,850	6,558	48.78	26.17	14.39	10.66	1,397	149 00	365	147
32,000	—21,000	79.72	15.10	15.09	—9.91	4,818	—477 00	727	148
87,652	16,698	56.31	26.50	14.10	2.69	1,912	51 00	514	149
3,100	8,400	18.18	29.55	14.09	38.18	1,833	700 00	541	150

METALS AND METALLIC GOODS.

\$2,900	—\$900	50.00	40.00	14.50	—4.50	\$800	—\$36 00	\$320	1
3,207	—1,067	56.46	39.94	12.88	—4.28	1,243	—53 00	434	2
14,900	3,100	57.15	30.00	10.64	2.21	1,400	31 00	420	3
8,800	—3,600	64.29	28.29	12.57	—5.15	1,750	—90 00	495	4
1,190	310	18.75	62.50	14.88	3.87	666	25 00	416	5
4,700	—3,300	41.07	52.84	20.44	—14.35	766	—110 00	405	6
29,100	1,900	52.50	34.58	12.13	.79	1,224	9 69	423	7
19,800	—6,800	48.55	42.03	14.34	—4.92	951	—46 00	400	8
56,500	—26,600	79.59	13.91	12.28	—5.78	4,600	—266 00	640	9
2,580	—1,380	43.48	47.83	18.69	—10.00	1,380	—138 00	660	10

METALS AND METALLIC GOODS — Continued.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
11	11	\$5,300	\$5,200	\$4,800	\$13,000	\$3,000	23.07
12	*60	10,000	5,000	75,000	95,000	15,000	15.79
13	16	14,000	6,000	12,000	20,000	2,000	10.00
14	20	8,000	10,242	54,000	67,000	2,758	4.11
15	18	10,000	6,172	12,580	25,000	6,248	24.99
16	8	20,000	5,454	10,000	18,000	2,546	14.14
17	20	25,000	8,500	12,000	25,000	4,500	18.00
18	10	15,000	5,700	12,000	23,000	5,300	23.04
19	70	130,000	28,874	95,400	165,702	41,428	25.00
20	60	50,000	23,000	32,000	70,000	15,000	21.43
21	7	3,000	5,250	8,000	15,000	1,750	11.66
22	50	75,000	26,223	40,117	83,068	16,728	20.14
23	12	2,000	7,000	15,000	25,000	3,000	12.00
24	16	5,000	7,500	25,000	35,000	2,500	7.14
25	20	25,000	18,000	24,500	44,275	1,775	4.01
26	200	300,000	64,123	199,633	361,590	97,834	27.05
27	16	15,000	10,800	21,000	34,000	2,200	6.47
28	18	10,000	7,125	60,000	80,000	12,875	16.10
29	70	40,000	25,000	4,000	55,000	26,000	47.27
30	20	25,000	15,000	17,000	40,000	8,000	20.00
31	72	50,000	26,500	52,375	96,400	17,525	18.17
32	75	40,000	10,000	6,500	20,000	3,500	17.50
33	20	25,000	16,000	75,000	200,000	109,000	54.50
34	18	5,000	10,428	15,000	30,000	4,572	15.24
35	10	25,000	6,000	3,500	12,000	2,500	20.83
36	350	582,000	157,500	100,800	268,750	10,450	3.88
37	25	59,245	11,377	26,828	51,480	13,275	25.78
38	25	30,000	12,000	32,000	58,000	14,000	24.14
39	11	5,000	5,000	10,000	20,000	5,000	25.00
40	40	50,000	18,500	68,226	144,060	57,334	39.80
41	30	145,000	8,000	70,000	108,000	30,000	27.78
42	10	8,000	6,000	7,000	14,000	1,000	7.14
43	25	25,000	9,740	30,000	50,000	10,260	20.52
44	15	20,000	15,000	25,000	50,000	10,000	20.00
45	25	32,000	14,383	35,000	57,132	7,749	13.56
46	28	15,000	11,735	10,000	34,294	12,559	36.62
47	13	10,000	8,000	9,300	22,000	4,700	21.36
48	10	4,500	5,000	20,000	33,000	8,000	24.24
49	28	30,000	13,200	11,860	30,860	5,800	18.80
50	21	25,000	15,000	40,000	60,000	5,000	8.33
51	10	11,000	5,000	6,000	15,000	4,000	26.66
52	50	50,000	20,000	65,000	100,000	15,000	15.00
53	25	25,000	10,500	4,000	17,500	3,000	17.14
54	11	25,000	5,800	8,300	21,500	7,400	34.42
55	36	150,000	16,054	140,000	191,000	34,946	18.30
56	30	100,000	15,000	35,000	150,000	100,000	66.67
57	30	10,000	12,000	6,000	24,000	6,000	25.00
58	76	40,000	36,000	30,000	75,000	9,000	12.00
59	134	75,000	44,000	44,000	125,000	37,000	29.60
60	35	8,000	14,400	14,000	35,000	6,600	18.86
61	55	17,000	19,000	10,000	30,000	1,000	3.33
62	75	75,000	36,000	35,000	75,000	4,000	5.33
63	80	60,000	25,000	25,000	75,000	25,000	33.33
64	35	8,000	24,000	6,000	40,000	10,000	25.00
65	70	25,000	24,000	12,000	60,000	24,000	40.00

METALS AND METALLIC GOODS — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$1,618	\$1,382	36.93	40.00	12.44	10.63	\$1,181	\$125 00	\$472	11
10,100	4,900	78.95	5.26	10.63	5.16	1,583	81 00	83	12
2,840	—840	60.00	30.00	14.20	—4.20	1,250	—52 00	375	13
7,180	—4,422	80.60	15.29	10.71	—6.60	3,350	—221 00	512	14
3,100	3,148	50.32	24.69	12.40	12.59	1,388	174 00	342	15
3,000	—454	55.56	30.30	16.66	—2.52	2,250	—56 00	681	16
4,000	500	48.00	34.00	16.00	2.00	1,250	25 00	425	17
3,200	2,100	52.18	24.78	13.91	9.13	2,300	210 00	570	18
24,370	17,058	57.57	17.43	14.71	10.29	2,367	243 00	412	19
10,000	5,000	45.71	32.86	14.29	7.14	1,166	83 00	383	20
1,680	70	53.33	35.00	11.20	.47	2,142	10 00	750	21
12,807	3,921	48.29	31.57	15.42	4.72	1,661	78 00	524	22
2,620	380	60.00	28.00	10.48	1.52	2,083	32 00	583	23
3,800	—1,300	71.43	21.43	10.85	—3.71	2,187	—81 00	468	24
5,928	—4,153	55.34	40.65	13.39	—9.38	2,213	—207 00	900	25
54,159	43,675	55.21	17.74	14.97	12.08	1,807	218 00	320	26
4,300	—2,100	61.77	31.77	12.64	—6.18	2,125	—131 00	675	27
8,600	4,275	75.00	8.90	10.75	5.35	4,444	237 00	395	28
7,900	18,100	7.27	45.46	14.36	32.91	785	258 00	357	29
5,500	2,500	42.50	37.50	13.75	6.25	2,000	125 00	750	30
12,640	4,885	54.33	27.50	13.11	5.06	1,338	67 00	368	31
4,400	—900	32.50	50.00	22.00	—4.50	266	—12 00	133	32
21,500	87,500	37.50	8.00	10.75	43.75	10,000	4,375 00	800	33
3,300	1,272	50.00	34.76	11.00	4.24	1,666	70 00	579	34
2,700	—200	29.17	50.00	22.50	—1.67	1,200	—20 00	600	35
61,795	—51,345	37.51	58.61	22.99	—19.11	767	—146 00	450	36
8,703	4,572	52.12	22.10	16.90	8.88	2,055	182 00	455	37
7,600	6,400	55.17	20.69	13.10	11.04	2,320	256 00	480	38
2,300	2,700	50.00	25.00	11.50	13.50	1,818	245 00	454	39
17,406	39,928	47.36	12.84	12.08	27.72	3,601	998 00	462	40
19,500	10,500	64.81	7.41	18.06	9.72	3,600	350 00	266	41
1,880	—880	50.00	42.86	13.42	—6.28	1,400	—88 00	600	42
6,500	3,760	60.00	19.48	13.00	7.52	2,000	150 00	389	43
6,200	3,800	50.00	30.00	12.40	7.60	3,333	253 00	1,000	44
7,633	116	61.26	25.18	13.36	.20	2,285	4 64	575	45
4,329	8,230	29.16	34.22	12.62	24.00	1,224	293 00	419	46
2,800	1,900	42.27	36.37	12.72	8.64	1,692	146 00	615	47
3,570	4,430	60.60	15.16	10.81	13.43	3,300	443 00	500	48
4,886	914	38.43	42.77	15.84	2.96	1,102	32 00	471	49
7,500	—2,500	66.67	25.00	12.50	—4.17	2,857	—119 00	714	50
2,160	1,840	40.00	33.34	14.40	12.26	1,500	184 00	500	51
13,000	2,000	65.00	20.00	13.00	2.00	2,000	40 00	400	52
3,250	—250	22.86	60.00	18.57	—1.43	700	—10 00	420	53
3,650	3,750	38.60	26.98	16.98	17.44	1,954	340 00	527	54
28,100	6,816	73.30	8.40	14.71	3.59	5,305	190 00	445	55
21,000	79,000	23.33	10.00	11.00	52.67	5,000	2,633 00	500	56
3,000	3,000	25.00	50.00	12.50	12.50	800	100 00	400	57
9,900	—900	40.00	48.00	13.20	—1.20	986	—11 00	473	58
17,000	20,000	35.20	35.20	13.60	16.00	932	149 00	328	59
3,980	2,620	40.00	41.14	11.37	7.49	1,000	74 00	411	60
4,020	—3,020	33.33	63.34	13.40	—10.07	545	—54 00	345	61
12,000	—8,000	46.67	48.00	16.00	—10.67	1,000	—106 00	480	62
11,100	13,900	33.34	33.33	14.80	18.53	937	173 00	312	63
4,480	5,520	15.00	60.00	11.20	13.80	1,142	157 00	685	64
7,500	16,500	20.00	40.00	12.50	27.50	857	235 00	342	65

METALS AND METALLIC GOODS — Continued.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
66	42	\$30,000	\$30,000	\$2,800	\$78,000	\$45,200	57.94
67	25	20,000	12,000	15,000	40,000	13,000	32.50
68	51	15,000	20,000	15,000	60,000	25,000	41.66
69	35	16,000	15,000	20,000	40,000	5,000	12.50
70	40	10,000	15,000	15,000	60,000	30,000	50.00
71	25	10,000	18,000	18,000	40,000	4,000	10.00
72	35	30,000	15,000	20,000	45,000	10,000	22.22
73	20	3,000	10,000	7,500	22,000	4,500	20.45
74	26	8,000	12,000	12,000	30,000	6,000	20.00
75	108	75,000	54,000	120,000	200,000	26,000	13.00
76	120	80,000	59,000	133,150	200,000	7,850	3.92
77	65	50,000	27,000	20,000	65,000	18,000	27.69
78	26	20,000	18,000	18,000	42,000	6,000	14.28
79	12	7,500	5,000	3,750	13,000	4,250	32.69
80	94	30,000	52,000	33,000	150,000	65,000	43.33
81	110	60,000	59,733	105,000	175,000	10,267	5.86
82	42	25,000	24,000	25,000	60,000	11,000	18.33
83	48	106,000	34,039	40,000	102,000	27,961	27.41
84	65	50,000	25,000	36,000	80,000	19,000	23.75
85	15	4,000	8,000	2,000	12,000	2,000	16.66
86	45	40,000	20,336	22,112	81,782	39,304	48.06
87	45	75,000	22,495	36,864	155,640	96,281	61.86
88	65	40,000	25,000	26,500	80,000	28,500	35.62
89	39	10,000	14,122	20,000	50,000	15,878	31.76
90	10	5,000	6,000	10,000	25,000	9,000	36.00
91	14	6,000	8,000	10,000	24,000	6,000	25.00
92	75	30,000	30,000	10,000	45,000	5,000	11.11
93	63	50,000	32,327	46,000	100,000	21,673	21.67
94	31	25,000	20,000	25,000	50,000	5,000	10.00
95	80	80,000	39,600	40,000	100,000	20,400	20.40
96	30	4,000	10,000	5,200	24,000	8,800	36.66
97	19	10,000	12,000	20,000	45,000	13,000	28.88
98	26	40,000	15,000	25,000	60,000	20,000	33.33
99	75	20,000	33,000	34,000	75,000	8,000	10.67
100	23	25,000	7,500	15,000	35,000	12,500	35.71
101	50	50,000	30,696	40,000	100,000	29,304	29.30
102	55	25,000	13,000	20,000	50,000	17,000	34.00
103	125	155,000	50,000	100,000	175,000	25,000	14.28
104	549	505,000	141,607	319,918	634,100	172,575	27.21
105	20	10,000	7,500	8,000	20,000	4,500	22.50
106	40	30,000	17,422	14,900	38,500	6,178	16.04
107	11	20,000	5,350	5,750	13,300	2,200	16.54
108	63	25,000	25,000	25,000	75,000	25,000	33.33
109	50	100,000	26,227	23,400	97,000	47,373	48.83
110	77	250,000	36,282	185,823	254,461	32,356	12.71
111	100	200,000	40,000	177,200	246,050	28,850	11.72
112	14	12,000	5,560	8,000	20,000	6,500	32.50
113	20	6,000	7,800	12,000	25,000	5,200	20.80
114	100	40,000	36,000	10,000	75,000	29,000	38.66
115	23	5,000	7,000	7,000	24,000	10,000	41.66
116	180	278,395	63,500	146,050	306,200	96,650	31.56
117	35	30,000	20,000	10,000	60,000	30,000	50.00
118	300	360,000	117,919	317,100	607,000	171,981	28.33
119	710	300,000	350,000	225,000	605,000	30,000	4.96
120	163	450,000	60,000	525,000	640,000	55,000	8.59

METALS AND METALLIC GOODS — Continued.

Estimated interest and expenses.	Net profit and loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$9,600	\$35,600	3.59	38.47	12.30	45.64	\$1,857	\$847 00	\$711	66
5,200	7,800	37.50	30.00	13.00	19.50	1,600	312 00	480	67
6,900	18,100	25.00	33.34	11.50	30.16	1,176	354 00	392	68
4,960	40	50.00	37.50	12.40	.10	1,142	1 14	428	69
6,600	23,400	25.00	25.00	11.00	39.00	1,500	585 00	375	70
4,600	—600	45.00	45.00	11.50	—1.50	1,600	—24 00	720	71
6,300	3,700	44.45	33.33	14.00	8.22	1,285	105 00	428	72
2,380	2,120	31.09	45.46	10.82	9.63	1,100	106 00	500	73
3,480	2,520	40.00	40 00	11.60	8.40	1,153	96 00	461	74
24,500	1,500	60.00	27.00	12.25	.75	1,851	13 00	500	75
24,800	—16,950	66.58	29.50	12.40	—8.48	1,666	—141 00	491	76
9,500	8,500	30.77	41.54	14.61	13.08	1,000	130 00	415	77
5,400	600	42.86	42.86	12.85	1.43	1,615	23 00	692	78
1,750	2,500	28.85	38.46	13.46	19.23	1,083	208 00	416	79
16,800	48,200	22.00	34.67	11.20	32.13	1,595	512 00	553	80
21,100	—10,833	60.00	34.14	12.05	—6.19	1,590	—98 00	543	81
7,500	3,500	41.67	40.00	12.50	5.83	1,428	83 00	571	82
16,560	11,401	39.22	33.37	16.23	11.18	2,125	237 00	709	83
11,000	8,000	45.00	31.25	13.75	10.00	1,230	123 00	384	84
1,440	560	16.67	66.67	12.00	4.66	800	37 00	533	85
10,578	28,726	27.07	24.87	12.93	35.13	1,817	638 00	451	86
20,064	76,217	23.69	14.45	12.89	48.97	3,458	1,693 00	499	87
10,400	18,100	33.13	31.25	13.00	22.62	1,230	278 00	384	88
5,600	10,278	40 00	28.24	11.20	20.56	1,282	263 00	362	89
2,800	6,200	40.00	24.00	11.20	24.80	2,500	620 00	600	90
2,760	3,240	41.67	33.33	11.50	13.50	1,713	231 00	571	91
6,300	—1,300	22.22	66.67	14.00	—2.89	600	—17 00	400	92
13,000	8,673	46.00	32.33	13.00	8.67	1,587	137 00	513	93
6,500	—1,500	50.00	40.00	13.00	—3.00	1,612	—48 00	645	94
14,800	5,600	40.00	39.60	14.80	5 60	1,250	70 00	495	95
2,640	6,160	21.67	41.67	11.00	25 66	800	205 00	333	96
5,100	7,900	44.45	26.67	11.33	17.55	2,368	415 00	631	97
8,400	11,600	41.67	25.00	14.00	19.33	2,307	446 00	576	98
8,700	—700	45.33	44.00	11.60	—.93	1,000	—9 33	440	99
5,000	7,500	42.86	21.43	14.28	21.43	1,521	326 00	326	100
13,000	16,304	40.00	30.70	13.00	16.30	2,000	326 00	613	101
6,500	10,500	40.00	26.00	13.00	21.00	909	190 00	200	102
26,800	—1,800	57.15	28.57	15.31	—1.03	1,400	—12 00	400	103
93,710	78,865	50.46	22.33	14.78	12.43	1,155	143 00	257	104
2,600	1,900	40.00	37 50	13.00	9.50	10,000	95 00	375	105
5,650	528	38.70	45.26	14.67	1.37	962	13 00	435	106
2,530	—330	43.23	40 23	19.02	—2.48	1,209	—30 00	486	107
9,000	16,000	33 34	33.33	12.00	21.33	1,190	253 00	396	108
15,700	31,673	24.13	27.04	16.18	32.65	1,940	633 00	524	109
40,446	—8,090	73.03	14.26	15.89	—3.18	3,304	—105 00	471	110
36,605	—7,755	72.02	16.26	14.87	—3.15	2,460	—77 00	400	111
2,720	3,780	40 00	27.50	13.60	18.90	1,428	270 00	392	112
2,860	2,340	48.00	31.20	11 44	9.36	1,250	117 00	390	113
9,900	19,100	13.34	48.00	13.20	25.46	750	191 00	360	114
2,700	7,300	29.17	29 17	11.25	30.41	1,043	317 00	304	115
47,324	49,326	47.70	20.74	15.45	16.11	1,701	274 00	352	116
7,800	22,200	16.67	33.33	13.00	37.00	1,714	634 00	571	117
82,300	89,681	52.24	19.43	13.56	14.77	2,023	298 00	393	118
78,500	—48,500	37.19	57.85	12.97	—8.01	852	—68 00	492	119
91,000	—36,000	82.03	9.38	14.21	—5.62	3,926	—220 00	368	120

METALS AND METALLIC GOODS — Continued.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
121	88	\$120,000	\$35,000	\$137,000	\$200,000	\$28,000	14.00
122	33	15,000	8,865	46,640	58,225	2,720	4.67
123	314	350,000	130,000	400,000	550,000	20,000	3.63
124	58	50,000	24,120	48,790	97,432	24,522	25.16
125	40	25,000	10,785	17,147	32,718	4,786	14.63
126	115	175,000	54,230	79,900	161,700	27,570	17.05
127	300	250,000	117,903	69,070	216,392	29,419	13.59
128	25	8,000	9,000	15,000	36,000	12,000	33.33
129	19	5,000	13,500	9,000	24,750	2,250	9.09
130	60	25,000	35,574	26,939	74,017	11,504	15.54
131	50	75,000	27,388	85,295	160,736	48,053	29.89
132	8	12,000	5,400	5,000	15,000	4,600	30.66
133	50	26,400	16,000	11,000	50,000	23,000	46.00
134	20	25,000	7,755	6,850	15,500	895	5.77
135	60	30,000	30,000	60,000	100,000	10,000	10.00
136	20	12,000	8,235	25,000	42,000	8,765	20.86
137	18	15,000	10,000	20,000	35,000	5,000	14.28
138	10	20,000	5,250	20,000	30,000	4,750	15.83
139	100	125,000	50,000	150,000	225,000	25,000	11.11
140	14	12,000	7,000	20,000	30,000	3,000	10.00
141	70	50,000	22,000	30,000	75,000	23,000	30.66
142	125	100,000	36,000	21,165	84,660	27,495	32.47
143	22	35,000	15,000	50,000	80,000	15,000	18.75
144	15	43,000	9,000	15,000	30,000	6,000	20.00
145	60	30,000	19,235	37,639	136,407	79,533	58.30
146	21	17,000	10,000	55,000	72,000	7,000	9.72
147	86	70,000	36,000	53,000	112,000	23,000	20.53
148	605	924,408	224,095	565,582	877,757	88,080	10.03
149	105	250,000	51,000	502,420	1,043,000	489,580	46.94
150	410	250,000	169,000	290,400	712,000	252,600	35.47
151	45	20,000	18,000	40,000	64,000	6,000	9.37
152	60	60,000	25,000	28,000	62,000	9,000	14.51
153	17	8,000	7,500	8,000	20,000	4,500	22.50
154	30	40,000	17,480	35,447	54,527	1,600	2.93
155	20	15,000	13,416	30,000	53,000	9,584	18.08
156	29	10,000	19,500	18,000	43,000	5,500	12.79
157	25	25,000	12,000	10,000	30,000	8,000	26.66
158	13	3,500	7,000	2,000	15,000	6,000	40.00
159	14	5,000	7,000	8,000	17,000	2,000	11.76
160	9	2,500	5,200	5,500	12,800	2,100	16.40
161	10	1,000	5,500	800	10,000	3,700	37.00
162	40	10,000	18,750	10,000	50,000	21,250	42.50
163	18	1,000	10,000	3,000	16,000	3,000	18.75
164	11	5,000	7,000	27,000	37,000	3,000	8.11
165	22	75,000	15,000	15,325	35,161	4,836	13.76
166	15	20,000	9,170	440	14,613	5,003	34.23
167	40	150,000	19,127	118,390	154,218	16,701	10.83
168	180	300,000	84,000	137,000	275,000	54,000	19.63
169	39	9,000	12,174	31,112	49,189	5,903	12.00
170	28	15,000	13,800	18,000	40,800	9,000	22.05
171	94	80,000	56,979	30,000	100,000	13,021	13.02
172	22	10,000	15,000	10,000	30,000	5,000	16.66
173	100	60,000	50,000	200,000	300,000	50,000	16.66
174	65	25,000	23,605	27,400	60,000	8,995	14.99
175	20	12,000	7,800	6,000	20,000	6,200	31.00

METALS AND METALLIC GOODS — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employé.	Average yearly net profit per employé.	Average yearly earnings of each employé.	ESTABLISHMENTS.
\$27,200	\$800	68.50	17.50	13.60	.40	\$2,272	\$9 09	\$397	121
6,723	—1,003	80.10	15.23	11.54	—6.87	1,764	—121 00	268	122
76,000	—76,000	72.73	23.64	13.81	—10.18	1,751	—178 00	414	123
12,743	11,779	50.08	24.76	13.07	12.09	1,679	203 00	415	124
4,772	14	52.40	32.97	14.59	.04	817	35	269	125
26,670	900	49.41	33.54	16.49	.56	1,406	7 82	471	126
36,639	—7,220	31.92	54.49	16.93	—3.34	721	—24 00	393	127
4,080	7,920	41.67	25.00	11.33	22.00	1,440	316 00	360	128
2,775	—525	36.36	54.55	11 21	—2.12	1,302	—27 00	710	129
8,902	2,602	36.40	48.06	12.03	3.51	1,233	43 00	592	130
20,574	27,479	53.07	17.04	12.80	17.09	3,214	549 00	547	131
2,220	2,380	33.34	36.00	14.80	15.86	1,874	297 00	674	132
6,584	16,416	22.00	32.00	13.17	32.83	1,000	328 00	320	133
3,050	—2,155	44.20	50.03	19.67	—13 90	775	—107 00	387	134
11,800	—1,800	60.00	30.00	11.80	—1.80	1,666	—30 00	500	135
4,920	3,845	59.53	19.61	11.71	9.15	2,100	192 00	411	136
4,400	600	57.15	28.57	12.57	1.71	1,944	33 00	555	137
4,200	550	66.67	17.50	14.00	1 83	3,000	55 00	525	138
30,000	—5,000	66.67	22.22	13.33	—2.22	2,250	—50 00	500	139
3,720	—720	66.67	23.33	12.40	—2.40	2,142	—51 00	500	140
10,500	12,500	40.00	29.34	14.00	16.66	1,071	178 00	314	141
14,466	13,029	25.00	42.53	17.09	15.38	677	104 00	288	142
10,100	4,900	62.50	18.75	12.63	6.12	3,636	222 00	681	143
5,580	420	50.00	30.00	18.60	1.40	2,000	28 00	600	144
15,441	64,092	27.60	14.10	11.32	46.98	2,273	1,066 00	320	145
8,220	—1,220	76.39	13.89	11.41	—1 69	3,428	—58 00	476	146
15,400	7,600	47.32	32.15	13.75	6.78	1,302	86 00	418	147
143,240	—55,160	64.44	25.53	16 31	—6.28	1,450	—91 00	370	148
119,300	370,280	48.17	4.89	11.44	35.50	9,933	3,526 00	485	149
86,200	166,400	40.79	23.74	12.10	23.37	173	405 00	412	150
7,600	—1,600	62.50	28.13	11.87	—2.50	1,422	—35 00	400	151
9,800	—800	45.16	40.33	15.80	—1.29	1,033	—13 00	416	152
2,480	2,020	40.00	37.50	12.40	10.10	1,176	118 00	441	153
7,853	—6,253	65.01	32.06	14.40	—11.47	1,817	—308 00	582	154
6,200	3,384	56.61	25.31	11.70	6.38	2,650	169 00	670	155
4,900	600	41.86	45.35	11.40	1 39	1,482	20 00	672	156
4,500	3,500	33.34	40.00	15.00	11.66	1,200	140 00	480	157
1,710	4,290	13.33	46.67	11.40	28.60	1,161	330 00	538	158
2,000	—	47.06	41.18	11.76	—	1,214	—	500	159
1,430	670	42.97	40.63	11.17	5.23	1,422	74 00	577	160
1,060	2,640	8.00	55.00	10.60	26.40	1,000	264 00	550	161
5,600	15,650	20.00	37.50	11.20	31.30	1,250	391 00	468	162
1,660	1,340	18.75	62.50	10.38	8.37	888	74 00	555	163
4,000	—1,000	72.97	18.92	10.81	—2.70	3,363	—90 00	636	164
8,016	—3,180	43.58	42.66	22.80	—9.04	1,098	—99 00	468	165
2,661	2,342	3.01	62.76	17.52	16 71	974	156 00	611	166
24,422	—7,721	76.77	12.40	15.83	—5.00	3,855	—193 00	478	167
45,500	8,500	49.82	30.55	16.54	3.09	1,527	47 00	466	168
5,459	444	63.25	24.75	11.10	.90	1,261	11 00	312	169
4,980	4,020	44.12	33.83	12.20	9.85	1,457	143 00	492	170
14,800	—1,779	30.00	56.98	14.80	—1.78	1,063	—18 00	606	171
3,600	1,400	33.34	50 00	12.00	4.66	1,363	63 00	681	172
33,600	16,400	66.67	16.67	11.20	5.46	3,000	164 00	500	173
7,500	1,495	45.67	39.34	12.50	2.49	923	23 00	363	174
2,720	3,480	30.00	39.00	13.60	17.40	1,000	174 00	390	175

METALS AND METALLIC GOODS — Continued.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
176	28	\$18,000	\$13,000	\$32,000	\$60,000	\$15,000	25.00
177	14	5,000	7,500	5,000	20,000	7,500	37.50
178	11	3,500	5,200	8,504	20,400	6,696	32.82
179	12	9,000	6,500	14,000	26,000	5,500	21.15
180	10	10,000	5,000	10,000	20,000	5,000	25.00
181	12	300	6,500	1,000	13,000	5,500	42.30
182	53	50,000	23,546	28,000	63,000	11,454	18.18
183	12	4,000	6,700	22,000	40,000	11,300	28.25
184	13	8,000	6,980	54,000	66,000	5,020	7.60
185	10	20,000	7,000	26,000	36,000	3,000	8.33
186	44	25,000	20,000	45,000	80,000	15,000	18.75
187	90	37,200	41,000	20,000	80,000	19,000	23.75
188	40	30,000	25,000	25,000	75,000	25,000	33.33
189	8	5,000	5,000	12,000	20,000	3,000	15.00
190	20	9,000	13,000	10,000	30,000	7,000	23.33
191	9	1,000	5,200	1,650	9,000	2,150	23.88
192	13	1,500	9,000	2,000	16,000	5,000	31.25
193	8	1,200	5,000	12,000	20,000	3,000	15.00
194	15	5,000	7,250	12,000	27,000	7,750	28.70
195	11	15,000	5,000	10,000	24,000	9,000	37.50
196	32	5,000	19,888	10,437	37,441	7,116	19.00
197	36	10,000	15,487	5,000	25,000	5,113	19.97
198	34	30,000	13,750	38,000	90,000	38,250	42.50
199	37	15,000	22,800	26,000	50,000	1,200	2.40
200	13	15,000	7,800	13,000	25,000	4,200	16.80
201	90	45,000	25,000	35,000	100,000	40,000	40.00
202	11	1,000	6,300	1,860	9,260	1,100	11.87
203	8	1,000	5,200	5,000	12,500	2,300	18.40
204	24	10,000	10,800	8,100	20,000	1,100	5.50
205	50	25,000	20,000	100,000	150,000	30,000	20.00
206	35	10,000	9,000	20,000	50,000	21,000	42.00
207	10	6,000	5,800	5,610	13,000	1,590	12.23
208	7	50,000	5,200	7,000	30,000	17,800	59.33
209	38	25,000	16,000	25,000	45,000	4,000	8.89
210	11	10,000	6,000	12,000	21,000	3,000	14.28
211	12	40,000	10,000	30,000	50,000	10,000	20.00
212	20	6,000	5,000	9,000	15,000	1,000	6.67
213	16	8,000	7,500	12,000	30,000	10,500	35.00
214	18	2,000	5,200	2,700	10,000	2,100	21.00
215	50	16,000	30,000	50,000	100,000	20,000	20.00
216	40	35,000	36,000	25,000	75,000	14,000	18.66
217	20	5,000	7,400	9,000	18,000	1,600	8.88
218	64	30,000	30,628	25,000	60,000	4,372	7.28
219	8	8,000	5,096	2,500	9,300	1,704	18.32
220	21	5,000	13,341	3,661	22,258	5,256	23.61
221	23	10,000	17,174	9,628	35,000	8,198	23.42
222	10	2,000	7,800	4,100	14,000	2,100	15.00
223	40	50,000	21,600	24,680	50,000	3,720	7.44
224	40	100,000	24,000	14,000	48,420	10,420	21.52
225	35	30,000	17,500	8,500	45,000	19,000	42.22
226	15	5,000	8,400	18,000	30,000	3,600	12.00
227	15	5,000	6,500	3,500	11,000	1,000	9.09
228	60	70,000	24,050	75,000	125,000	25,950	20.76
229	14	5,000	9,200	7,000	23,500	7,300	31.06
230	10	10,000	5,000	4,500	10,000	500	5.00

METALS AND METALLIC GOODS — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$7,080	\$7,920	53.33	21.67	11.80	13.20	\$2,142	\$282 00	\$464	176
2,300	5,200	25.00	37.50	11.50	26.00	1,428	371 00	535	177
2,250	4,446	41.69	25.49	11.03	21.79	1,854	404 00	472	178
3,140	2,360	53.85	25.00	12.08	9.07	2,166	196 00	541	179
2,600	2,400	50.00	25.00	13.00	12.00	2,000	240 00	500	180
1,318	4,182	7.70	50.00	10.13	32.17	1,083	348 00	541	181
9,300	2,154	44.45	37.37	14.76	3.42	1,188	40 00	444	182
4,240	7,060	55.00	16.75	10.60	17.65	3,333	588 00	558	183
7,080	—2,060	81.82	10.58	10.72	—3.12	5,076	—158 00	536	184
4,800	—1,800	72.22	19.45	13.33	—5.00	3,600	—180 00	700	185
9,500	5,500	56.25	25.00	11.88	6.87	1,818	125 00	454	186
10,232	8,768	25.00	51.25	12.79	10.96	888	97 00	455	187
9,300	15,700	33.34	33.33	12.40	20.93	1,875	392 00	625	188
2,300	700	60.00	25.00	11.50	3.50	2,500	87 00	625	189
3,540	3,460	33.33	43.34	11.80	11.53	1,500	173 00	650	190
960	1,190	18.34	57.78	10.66	13.22	1,000	132 00	577	191
1,690	3,310	12.50	56.25	10.56	20.69	1,230	254 00	692	192
2,072	928	60.00	25.00	10.36	4.64	2,500	116 00	625	193
3,000	4,750	44.45	26.85	11.11	17.59	1,800	316 00	483	194
3,300	5,700	41.67	20.83	13.75	23.75	2,181	518 00	454	195
4,044	3,072	27.88	53.12	10.80	8.20	1,170	96 00	621	196
3,160	1,953	19.53	60.50	12.34	7.63	711	54 00	430	197
10,800	27,450	42.22	15.28	12.00	30.50	2,647	807 00	404	198
5,900	—4,700	52.00	45.60	11.80	—9.40	1,282	—120 00	584	199
3,400	800	52.00	31.20	13.60	3.20	1,923	61 00	600	200
12,700	27,300	35.00	25.00	12.70	27.30	1,111	303 00	277	201
986	114	20.09	68.04	10.64	1.23	841	10 00	572	202
1,310	990	40.00	41.60	10.48	7.92	1,562	123 00	650	203
2,600	—1,500	40.50	54.00	13.00	—7.50	833	—62 00	450	204
16,500	13,500	66.67	13.33	11.00	9.00	3,000	270 00	400	205
5,600	15,400	40.00	18.00	11.20	30.80	1,428	440 00	257	206
1,660	—70	43.15	44.62	12.76	—5.3	1,300	—7 00	580	207
6,000	11,800	23.34	17.33	20.00	39.33	4,285	1,685 00	742	208
6,000	—2,000	55.56	35.55	13.33	—4.44	1,184	—52 00	421	209
2,700	300	57.15	28.57	12.85	1.43	1,909	27 00	545	210
7,400	2,600	60.00	20.00	14.80	5.20	4,166	216 00	833	211
1,860	—860	60.00	33.33	12.40	—5.73	750	—43 00	250	212
3,480	7,020	40.00	25.00	11.60	23.40	1,875	438 00	468	213
1,120	980	27.00	52.00	11.20	9.80	555	54 00	283	214
10,960	9,040	50.00	30.00	10.96	9.04	2,000	180 00	600	215
9,600	4,400	33.34	48.00	12.80	5.86	1,875	110 00	900	216
2,100	—500	50.00	41.12	11.66	—2.78	900	—25 00	370	217
7,800	—3,428	41.67	51.05	13.00	—5.72	937	—53 00	478	218
1,410	294	26.88	54.80	15.16	3.16	1,162	36 00	637	219
2,526	2,730	16.45	59.94	11.34	12.27	1,059	130 00	635	220
4,100	4,098	27.51	49.07	11.71	11.71	1,521	178 00	746	221
1,520	580	29.29	55.71	10.85	4.15	1,400	58 00	780	222
8,000	—4,280	49.36	43.20	16.00	—8.56	1,250	—107 00	540	223
10,842	—422	28.91	49.57	22.39	—87	1,210	—10 00	600	224
6,300	12,700	18.89	38.89	14.00	28.22	1,285	362 00	500	225
3,300	300	60.00	28.00	11.00	1.00	2,000	20 00	560	226
1,400	—400	31.82	59.09	12.72	—3.63	733	—26 00	433	227
16,700	9,250	60.00	19.24	13.36	7.40	2,083	154 00	400	228
2,650	4,650	29.79	39.15	11.27	19.79	1,678	332 00	657	229
1,600	—1,100	45.00	50.00	16.00	—11.00	1,000	—110 00	500	230

METALS AND METALLIC GOODS — Concluded.

ESTABLISHMENTS.	Average number of employ'cs.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit	Percentage of gross profit of value of product.
231	18	\$6,000	\$5,616	\$15,000	\$23,000	\$2,384	10.36
232	24	8,600	11,000	20,000	38,000	7,000	18.42
233	80	25,000	20,169	23,157	55,100	11,774	21.36
234	11	1,000	5,085	6,500	13,250	1,665	12.56
235	204	350,000	80,677	189,000	410,443	140,766	34.29
236	28	10,000	8,000	15,000	35,000	12,000	34.28
237	10	1,200	7,800	3,400	12,000	800	6.66
238	20	15,000	15,600	1,200	37,000	20,200	54.59
239	25	15,000	13,000	5,000	35,000	17,000	48.57
240	30	100,000	14,000	11,000	29,000	4,000	13.79
241	185	100,000	70,000	65,000	190,000	55,000	28.94
242	46	30,000	21,100	31,549	68,600	15,951	23.25
243	12	30,000	6,500	20,000	38,000	11,500	30.26
244	115	150,000	54,978	31,315	94,578	8,285	8.76
245	135	50,000	38,271	117,672	178,798	22,855	12.78
246	60	100,000	30,000	150,000	200,000	20,000	10.00
247	75	40,000	20,086	29,553	59,244	9,605	16.21
248	2,300	1,500,000	862,326	2,725,600	4,084,000	496,074	12.14
249	90	10,000	45,000	64,000	140,000	31,000	22.13
250	17	2,000	8,000	4,000	15,000	3,000	20.00
251	45	25,000	29,000	34,100	75,500	12,400	16.42
252	38	25,000	8,000	12,000	22,000	2,000	9.09
253	130	150,000	93,600	100,000	230,000	36,400	15.82
254	22	37,500	9,100	18,560	35,360	7,700	21.77
255	15	32,560	12,797	30,629	52,405	8,979	17.13
256	16	8,000	12,000	20,000	35,000	3,000	8.57
257	224	200,000	53,000	225,015	308,000	29,985	9.73
258	25	50,000	5,584	11,193	21,993	5,216	23.71
259	33	25,000	8,000	20,000	40,000	12,000	30.00
260	400	480,000	163,000	738,500	964,166	62,666	6.49
261	100	45,000	40,000	16,000	72,000	16,000	22.22
262	70	75,000	23,926	49,075	107,800	34,799	32.29
263	65	40,000	36,000	100,000	150,000	14,000	9.33
264	90	100,000	43,269	210,780	304,692	50,643	16.62
265	215	456,555	82,000	225,000	375,000	68,000	18.13
266	95	250,000	60,000	300,000	400,000	40,000	10.00
267	200	100,000	83,889	211,440	314,750	19,421	6.17
268	125	200,000	43,209	171,196	325,171	110,766	34.06
269	150	185,000	50,000	50,000	165,000	65,000	39.39
270	80	300,000	41,000	400,000	500,000	59,000	11.80

MUSICAL INSTRUMENTS.

1	242	\$60,000	\$116,078	\$75,000	\$199,000	\$7,922	3.98
2	26	8,000	10,500	11,690	24,500	2,310	9.42
3	340	521,000	242,900	210,300	563,500	110,300	19.57
4	115	35,000	60,000	35,000	100,000	5,000	5.00
5	14	13,000	7,560	6,500	18,600	4,540	24.40
6	30	40,000	16,785	13,200	48,250	18,265	37.85
7	8	1,000	5,000	3,000	10,000	2,000	20.00
8	12	2,500	11,000	5,500	22,000	5,500	25.00
9	20	3,000	9,000	17,425	34,114	7,689	22.53
10	80	300,000	53,800	75,000	150,000	21,200	14.13

METALS AND METALLIC GOODS — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$2,660	—\$276	65.22	24.42	11.56	—1.20	\$1,277	—\$15 00	\$312	231
4,280	2,720	52.63	28.95	11.26	7.16	1,583	113 00	458	232
7,010	4,764	42.03	36.61	12.72	8.64	688	59 00	252	233
1,385	280	49.06	38.38	10.45	2.11	1,204	25 00	462	234
62,044	78,722	46.05	19.66	15.11	19.18	2,011	385 00	395	235
4,100	7,900	42.86	22.86	11.71	22.57	1,250	282 00	285	236
1,272	—472	28.34	65.00	10.60	—3.94	1,200	—47 00	780	237
4,600	15,600	3.25	42.16	12.43	42.16	1,850	780 00	780	238
4,400	12,600	14.29	37.14	12.57	36.00	1,400	504 00	520	239
8,900	—4,900	37.93	48.28	30.68	—16.89	966	—163 00	466	240
25,000	30,000	34.21	36.85	13.15	15.79	1,027	162 00	378	241
8,660	7,291	45.99	30.76	12.62	10.63	1,491	158 00	458	242
5,600	5,900	52.63	17.11	14.73	15.53	3,166	491 00	541	243
18,458	—10,173	33.11	58.13	19.51	—10.75	822	—83 00	478	244
20,880	1,975	65.82	21.40	11.67	1.11	1,324	14 00	286	245
26,000	—6,000	75.00	15.00	13.00	—3.00	3,333	—100 00	500	246
8,324	1,281	49.88	33.91	14.05	2.16	789	17 00	267	247
498,400	—2,326	66.74	21.12	12.20	— .06	1,775	—1 00	374	248
14,600	16,400	45.72	32.15	10.42	11.71	1,555	182 00	500	249
1,620	1,380	26.67	53.33	10.80	9.20	882	81 00	470	250
9,050	3,350	45.16	38.42	11.98	4.44	1,677	74 00	644	251
3,700	—1,700	54.55	36.36	16.81	—7.72	578	—44 00	210	252
32,000	4,400	43.48	40.70	13.91	1.91	1,769	33 00	720	253
5,786	1,914	52.49	25.74	16.36	5.41	1,607	87 00	413	254
7,194	1,785	58.45	24.42	13.72	3.41	3,493	119 00	853	255
3,980	—980	57.14	34.29	11.37	—2.80	2,187	—61 00	750	256
42,800	—12,815	73.06	17.21	13.89	—4.16	1,375	—57 00	236	257
5,199	17	50.90	25.39	23.64	.07	879	68	223	258
5,500	6,500	50.00	20.00	13.75	16.25	1,212	196 00	242	259
125,217	—62,551	76.60	16.91	12.98	—6.49	2,410	—156 00	407	260
9,900	6,100	22.22	55.56	13.75	8.47	720	61 00	400	261
15,280	19,519	45.52	22.19	14.17	18.12	1,540	278 00	341	262
17,400	—3,400	66.67	24.00	11.60	—2.27	2,307	—52 00	553	263
36,469	14,174	69.18	14.20	11.96	4.66	3,385	157 00	480	264
64,893	3,107	60.00	21.87	17.30	.83	1,744	14 00	381	265
55,000	—15,000	75.00	15.00	13.75	—3.75	4,210	—157 00	631	266
37,475	—18,054	67.18	26.65	11.90	—5.73	1,573	90 00	419	267
44,517	66,249	52.65	13.29	13.69	20.37	2,601	529 00	345	268
27,600	37,400	30.31	30.30	16.72	22.67	1,100	252 00	333	269
68,000	—9,000	80.00	8.20	13.60	—1.80	6,250	—112 00	512	270

MUSICAL INSTRUMENTS.

\$23,500	—\$15,578	37.69	58.33	11.80	—7.82	\$822	—\$64 00	\$179	1
2,930	—620	47.72	42.86	11.95	—2.53	942	—23 00	403	2
87,610	22,690	37.32	43.11	15.55	4.02	1,657	66 00	714	3
12,100	—7,100	35.00	60.00	12.10	—7.10	869	—61 00	521	4
2,640	1,900	34.95	40.65	14.19	10.21	1,328	135 00	540	5
7,225	11,040	27.36	34.79	14.97	22.88	1,608	368 00	559	6
1,060	940	30.00	50.00	10.60	9.40	1,250	117 00	625	7
2,350	3,150	25.00	50.00	10.68	14.32	1,833	262 00	916	8
3,591	4,098	51.08	26.39	10.52	12.01	1,705	204 00	450	9
33,000	—11,800	50.00	35.87	22.00	—7.87	1,875	—147 00	672	10

MUSICAL INSTRUMENTS — Concluded.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
11	150	\$75,000	\$90,000	\$100,000	\$250,000	\$60,000	24.00
12	12	5,000	7,500	5,000	15,000	2,500	16.66
13	35	20,000	21,000	42,000	70,000	7,000	10.00
14	214	225,000	125,000	150,000	300,000	25,000	8.33
15	15	5,000	10,000	3,000	16,000	3,000	18.75
16	28	25,000	25,000	82,000	132,000	25,000	18.94
17	150	50,000	85,000	112,000	200,000	3,000	1.50
18	30	45,000	27,000	75,000	161,000	59,000	36.65
19	50	20,000	30,000	75,000	115,000	10,000	8.70
20	460	1,000,000	281,499	300,000	900,000	318,501	35.39
21	75	10,000	25,000	25,000	60,000	10,000	16.66
22	16	5,000	8,320	13,000	26,400	5,080	19.24
23	20	15,000	9,000	28,000	42,200	5,200	12.32
24	13	20,000	6,400	2,000	12,000	3,600	30.00
25	15	4,866	9,624	2,390	15,932	3,418	21.45
26	18	5,000	11,000	2,500	16,000	2,500	15.62
27	15	5,000	9,360	16,000	30,000	4,640	15.47
28	60	90,000	38,500	18,000	101,200	44,700	44.16
29	32	10,000	18,000	17,000	50,000	15,000	30.00
30	55	100,000	45,000	65,000	125,000	15,000	12.00
31	25	3,000	20,000	38,000	75,000	17,000	22.66
32	20	25,000	18,000	48,000	80,000	14,000	17.50
33	17	10,000	12,000	7,000	30,000	11,000	36.67
34	22	8,000	13,680	6,870	27,575	7,025	25.47
35	135	60,000	45,000	90,000	153,500	18,500	12.05
36	85	25,000	46,000	53,300	115,000	15,700	13.65
37	90	150,000	46,762	47,000	122,350	28,588	23.37
38	28	1,500	16,500	20,500	44,000	7,000	15.90
39	17	2,000	7,200	17,000	27,000	2,800	12.37
40	37	1,000	16,800	40,000	60,000	3,200	5.33

PAPER.

1	42	\$100,000	\$17,000	\$72,593	\$104,000	\$14,407	13.85
2	16	40,000	7,800	24,149	46,000	14,051	30.54
3	17	40,000	6,000	27,000	42,000	9,000	21.42
4	10	10,000	6,000	26,700	39,000	6,300	16.15
5	10	50,000	5,702	11,629	25,000	7,669	30.68
6	135	140,000	49,400	340,000	437,500	48,100	10.99
7	20	30,000	10,000	35,000	50,000	5,000	10.00
8	38	90,000	20,000	129,000	240,000	91,000	37.91
9	250	200,000	75,000	180,000	360,000	105,000	29.16
10	50	80,000	12,000	43,500	84,000	28,500	33.92
11	30	20,000	10,000	36,700	90,000	43,300	48.11
12	19	25,683	6,792	46,678	60,000	6,530	10.88
13	40	60,000	20,000	50,000	90,000	20,000	22.22
14	73	200,000	27,361	81,000	140,000	31,639	22.59
15	86	200,000	33,600	75,300	175,000	66,100	37.77
16	117	300,000	46,301	160,000	243,000	36,699	15.10
17	100	150,000	40,000	75,000	160,000	45,000	28.12
18	39	30,000	13,066	28,615	51,250	9,569	18.66
19	29	26,000	10,000	37,650	54,600	6,950	12.72
20	25	22,500	8,000	25,600	37,369	3,769	10.08

MUSICAL INSTRUMENTS — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$29,500	\$30,500	40.00	36.00	11.80	12.20	\$1,666	\$203 00	\$600	11
1,800	700	33.34	50 00	12.00	4.66	1,250	58 00	625	12
8,200	—1,200	60.00	30 00	11.71	—1.71	2,000	—34 00	600	13
43,500	—18,500	50.00	41.67	14.50	—6.17	1,401	—86 00	584	14
1,900	1,100	18.75	62.50	11.87	6.88	1,066	73 00	666	15
14,700	10,300	62.12	18.94	11.14	7.80	4,714	367 00	892	16
23,000	—20,000	56.00	42.50	11.50	—10.00	1,333	—133 00	566	17
18,800	40,200	46.58	16.77	11.68	24.97	5,366	1,340 00	900	18
12,700	—2,700	65.22	26.08	11.04	—2.34	2,300	—54 00	600	19
150,000	168,501	33.33	31.28	16.67	18.72	195	366 00	611	20
6,600	3,400	41.67	41.67	11.00	5.66	800	45 00	333	21
2,940	2,140	49.24	31.52	11.14	8.10	1,650	133 00	520	22
5,120	80	66.35	21.33	12.13	.19	2,110	4 00	450	23
2,400	1,200	16.67	53.33	20.00	10.00	923	92 00	492	24
1,885	1,533	18.14	60.41	11.83	9.62	1,062	102 00	641	25
1,900	600	15.63	68.75	11.87	3.75	888	33 00	611	26
3,300	1,340	53.33	31.20	11.00	4.47	2,000	89 00	624	27
15,520	29,180	17.79	38.05	15.33	28.83	1,686	486 00	641	28
5,600	9,400	34.00	36 00	11.20	18.80	1,562	293 00	562	29
18,500	—3,500	52.00	36.00	14 80	—2.80	2,272	—63 00	818	30
7,680	9,320	50.67	26.67	10.24	12.42	3,000	373 00	800	31
9,500	4,500	60.00	22.50	11.87	5.63	4,000	225 00	900	32
3,600	7,400	23.33	40.00	12.00	24.67	1,764	435 00	705	33
3,238	3,787	24.92	49.61	11.74	13 73	1,253	172 00	621	34
18,950	—450	58.63	29.32	12.34	—29	1,137	—3 33	333	35
13,000	2,700	46.35	40 00	11.30	2.35	1,352	31 00	541	36
21,235	7,353	38.41	38.22	17.36	6.01	1,359	81 00	519	37
4,490	2,510	46.60	37.50	10.20	5.70	1,571	89 00	589	38
2,820	—20	62.96	26.67	10.44	—0.7	1,588	—1 17	423	39
6,060	—2,860	66.67	28.00	10.10	—4.77	1,621	—77 00	454	40

PAPER.

\$16,400	—\$1,993	69.80	16.35	15.76	—1.91	\$2,476	—\$47 00	\$404	1
7,000	7,051	52.50	16 96	15.21	15 33	2,875	440 00	487	2
6,600	2,400	64.29	14.29	15.71	5.71	2,470	141 00	352	3
4,500	1,800	68.46	15.38	11.55	4.61	3,900	180 00	600	4
5,500	2,169	46.52	22.80	22 00	8.68	2,500	216 00	570	5
52,150	—4,050	77.72	11.29	11.92	—93	3,240	—30 00	365	6
6,800	—1,800	70.00	20.00	13 20	—3.20	2,500	—90 00	500	7
29,400	61,600	53.75	8.34	12.25	25.66	6,315	1,621 00	526	8
48,000	57,000	50.00	20.84	13.33	15.83	1,440	228 00	300	9
13,200	15,300	51.79	14.29	15.71	18.21	1,680	306 00	240	10
10,200	33,100	40.78	11.11	11.33	36 78	3,000	1,103 00	333	11
7,541	—1,011	77 80	11.32	12.56	—1.68	3,163	—53 00	357	12
12,600	7,400	55.56	22.22	14.00	8.22	2,250	185 00	500	13
26,000	5,639	57.86	19.55	18 57	4.02	1,917	77 00	374	14
29,500	36,600	43.03	19.20	16 86	20.91	2,034	425 00	390	15
42,300	—5,601	65.84	19.06	17.40	—2.30	2,076	—47 00	395	16
25,000	20,000	46.88	25.00	15.62	12.50	1,600	200 00	400	17
6,925	2,644	55.83	25.51	13.51	5.15	1,314	67 00	335	18
7,020	—70	68.96	18.32	12.85	—1.13	1,882	—2 41	344	19
5,087	—1,318	68.51	21.41	13.61	—3.53	1,494	—52 00	320	20

PAPER — Concluded.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
21	22	\$50,000	\$6,690	\$22,004	\$29,073	\$379	1.30
22	15	20,000	5,400	15,600	23,000	2,000	8.69
23	38	60,000	14,350	57,276	85,052	13,426	15.79
24	135	187,500	55,000	171,700	340,000	113,300	33.32
25	250	500,000	106,000	575,000	750,000	69,000	9.20
26	39	40,000	15,085	75,000	100,000	9,915	9.91
27	16	40,800	6,000	21,500	75,000	47,500	63.33
28	24	75,000	7,500	82,000	120,000	30,500	25.42
29	285	250,000	99,130	266,505	500,000	134,365	26.87
30	96	150,000	40,000	180,000	240,000	20,000	8.33
31	90	10,000	36,984	164,040	232,050	31,026	13.36
32	20	30,000	8,000	43,500	63,000	11,500	18.25
33	22	40,000	9,420	21,268	55,000	24,312	44.20
34	76	100,000	22,611	52,592	125,000	49,797	39.84
35	28	20,000	10,000	200,000	190,000	—20,000	—10.52
36	130	115,000	42,641	228,000	330,000	59,356	17.99
37	290	700,000	104,677	273,302	509,600	131,621	25.83
38	229	500,000	68,000	193,000	390,000	129,000	33.07
39	120	150,000	44,938	136,400	220,000	38,662	17.57
40	175	240,000	45,000	117,000	250,000	88,000	35.20
41	155	250,000	45,106	106,000	230,000	78,894	34.30
42	121	125,000	38,000	67,102	135,000	29,898	22.14
43	151	300,000	50,000	99,000	220,000	71,000	32.27
44	58	120,000	25,064	107,150	219,950	87,736	39.89
45	20	2,000	5,000	27,300	39,375	7,075	17.96
46	50	95,119	20,380	117,469	150,603	12,754	8.46
47	234	172,360	63,624	338,807	467,460	65,029	13.91
48	114	150,000	26,015	176,379	228,309	25,915	11.35
49	10	32,500	5,225	27,250	44,650	12,175	27.27
50	473	300,000	181,446	550,000	990,000	258,554	26.11
51	75	75,000	24,338	106,136	152,000	21,526	14.16
52	100	125,000	32,000	95,397	173,181	45,784	26.43
53	153	150,000	52,223	104,950	182,324	25,151	13.79
54	200	10,000	50,000	150,000	225,000	25,000	11.11
55	30	50,000	9,750	96,450	160,570	54,370	33.86
56	25	50,000	12,982	93,227	107,704	1,495	1.38
57	350	100,000	75,000	275,000	360,000	10,000	2.77
58	48	250,000	20,000	600,000	700,000	80,000	11.42
59	40	20,000	20,000	68,000	100,000	12,000	12.00
60	88	150,000	24,000	68,400	125,000	32,600	26.08
61	12	70,000	6,000	70,000	84,000	8,000	9.52
62	82	85,000	24,485	50,238	90,000	15,277	16.97
63	77	40,000	23,000	34,560	84,973	27,413	32.26
64	174	300,000	59,914	155,032	219,624	4,678	2.13
65	60	55,000	22,220	25,480	120,000	72,300	60.25
66	35	100,000	20,460	100,000	125,000	4,540	3.63
67	80	180,000	26,000	225,000	300,000	49,000	16.33
68	15	10,000	7,500	18,000	30,000	4,500	15.00
69	38	24,000	21,000	23,600	63,500	18,900	29.76
70	40	30,358	8,000	24,581	42,000	9,419	22.42

PAPER — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$5,907	—\$5,528	75.69	23.01	20.31	—19.01	\$1,321	—\$251 00	\$304	21
3,500	—1,500	67.83	23.48	15.21	—6.52	1,533	—100 00	360	22
12,105	1,321	67.34	16.87	14.23	1.56	2,238	34 00	377	23
45,250	68,050	50.50	16.18	13.30	20.02	2,518	504 00	407	24
105,000	—36,000	76.67	14.13	14.00	—4.80	3,000	—144 00	424	25
12,400	—2,485	75.00	15.09	12.40	—2.49	2,564	—63 00	386	26
9,948	37,552	28.67	8.00	13.26	50.07	4,687	2,347 00	375	27
16,500	14,000	68.33	6.25	13.75	11.67	5,000	583 00	312	28
65,000	69,365	53.30	19.83	13.00	13.87	1,754	243 00	347	29
33,000	—13,000	75.00	16.67	13.75	—5.42	2,500	—135 00	416	30
23,805	7,221	70.70	15.94	10.24	3.12	2,578	80 00	410	31
8,100	3,400	69.05	12.70	12.85	5.40	3,150	170 00	400	32
7,900	16,412	38.67	17.13	14.36	29.84	2,500	746 00	428	33
18,500	31,297	42.07	18.09	14.80	25.04	1,644	411 00	297	34
20,200	—40,200	105.26	5.26	10.63	—21.15	6,785	—1,435 00	357	35
39,900	19,456	69.09	12.92	12.09	5.90	2,538	149 00	328	36
92,960	38,661	53.63	20.54	18.24	7.59	1,757	133 00	360	37
69,000	60,000	49.49	17.44	17.69	15.38	1,703	262 00	296	38
31,000	7,662	62.00	20.43	14.09	3.48	1,833	63 00	374	39
39,400	48,600	46.80	18.00	15.76	19.44	1,428	277 00	257	40
38,000	40,894	46.09	19.61	16.52	17.78	1,483	263 00	291	41
21,000	8,898	49.71	28.15	15.55	6.59	1,115	73 00	341	42
40,000	31,000	45.00	22.73	18.18	14.09	1,456	205 00	331	43
29,195	58,541	48.71	11.40	13.27	26.62	3,792	1,009 00	432	44
4,058	3,017	69.34	12.70	10.30	7.66	1,968	150 00	250	45
20,767	—8,013	78.00	13.54	13.78	—5.32	3,012	—160 00	407	46
57,088	7,941	72.48	13.61	12.21	1.70	1,997	33 00	271	47
31,831	—5,916	77.25	11.40	13.94	—2.59	2,002	—51 00	229	48
6,415	5,760	61.03	11.70	14.37	12.90	4,465	576 00	522	49
117,000	141,554	55.56	18.33	11.81	14.30	2,095	299 00	383	50
19,700	1,826	69.83	16.01	12.96	1.20	2,026	24 00	324	51
24,818	20,966	55.09	18.48	14.33	12.10	1,731	209 00	320	52
27,232	—2,081	57.56	28.65	14.93	—1.14	1,191	—13 00	341	53
23,100	1,900	66.67	22.22	10.26	.85	1,125	9 50	250	54
19,057	35,313	60.07	6.07	11.87	21.99	5,352	1,177 00	325	55
13,770	—12,275	86.56	12.06	12.78	—11.40	4,308	—491 00	519	56
42,000	—32,000	76.39	20.84	11.66	—8.89	1,028	—91 00	214	57
85,000	—5,000	85.72	2.86	12.14	—72	14,583	—104 00	416	58
11,200	.00	68.00	20.00	11.20	.80	2,500	20 00	500	59
21,500	11,100	54.72	19.20	17.20	8.88	1,420	126 00	272	60
12,600	—4,600	83.34	7.14	15.00	—5.48	7,000	—383 00	500	61
14,100	1,177	55.83	27.20	15.66	1.31	1,097	14 00	298	62
10,897	16,516	40.67	27.07	12.82	19.44	1,103	214 00	298	63
39,962	—35,284	70.59	27.28	18.19	—16.06	1,262	—202 00	344	64
15,300	57,000	21.24	18.51	12.75	47.50	2,000	650 00	370	65
18,500	—13,960	80.00	16.37	14.80	—11.17	3,571	—398 00	584	66
40,800	8,200	75.00	8.67	13.60	2.73	3,750	102 00	325	67
3,600	900	60.00	25.00	12.00	3 00	2,000	60 00	500	68
7,790	11,110	37.17	33.07	12.26	17.50	1,671	292 00	552	69
6,021	3,398	58.53	19.05	14.33	8.09	1,050	84 00	200	70

PRINTING AND PUBLISHING.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
1	524	\$190,000	\$250,000	\$50,000	\$550,000	\$250,000	45.45
2	57	40,000	28,862	27,000	69,385	13,523	19.49
3	125	100,000	47,241	69,730	124,300	7,329	5.89
4	285	65,000	130,000	24,100	156,000	1,900	1.21
5	37	20,000	12,675	10,434	30,361	7,252	23.88
6	48	13,000	16,800	11,080	38,381	10,501	27.36
7	27	27,000	14,100	7,200	27,690	6,390	23.08
8	17	10,000	6,500	1,300	12,000	4,200	35.00
9	24	6,000	9,630	5,000	20,000	5,370	26.85
10	23	14,000	5,200	8,000	25,000	11,800	47.20
11	12	8,000	5,600	3,600	13,000	3,800	29.23
12	11	10,000	5,876	2,660	18,000	9,464	52.57
13	10	15,000	5,250	7,000	14,500	2,250	15.51
14	10	8,000	6,188	2,441	10,107	1,478	14.62
15	17	5,000	10,000	3,000	14,000	1,000	7.14
16	20	15,000	7,800	8,000	23,000	7,200	31.30
17	21	35,000	11,000	15,000	40,000	14,000	35.00
18	18	6,000	7,280	6,000	16,000	2,720	17.00
19	27	5,000	13,000	11,000	27,000	3,000	11.11
20	32	20,000	25,000	15,000	50,000	10,000	20.00
21	27	30,000	7,500	1,200	22,000	13,300	60.45
22	18	10,000	7,200	3,800	16,600	5,600	33.73
23	16	2,500	6,900	4,000	13,500	2,600	19.26
24	60	30,000	63,734	24,294	117,905	29,877	25.33
25	152	100,000	72,000	137,000	217,000	8,000	3.68
26	31	10,000	5,041	2,652	12,267	4,574	37.28
27	18	10,000	9,000	12,000	30,000	9,000	30.00
28	16	2,000	5,022	4,979	14,221	4,220	29.67
29	20	10,000	11,400	22,000	45,000	11,600	25.77
30	25	15,000	26,000	10,000	75,000	39,000	52.00
31	11	5,000	5,000	2,708	15,000	7,292	48.61
32	38	12,000	15,000	6,000	25,000	4,000	16.00
33	18	10,000	8,000	10,000	50,000	32,000	64.00
34	60	15,000	12,870	14,000	30,000	3,130	10.43
35	110	40,000	30,000	30,000	75,000	15,000	20.00
36	100	30,000	23,400	13,000	50,000	13,600	27.20
37	13	5,000	6,000	600	10,000	3,400	34.00
38	38	10,000	7,800	1,000	12,000	3,200	26.66
39	15	3,500	7,800	2,000	12,000	2,200	18.33
40	25	13,500	8,050	12,500	27,000	6,450	23.88
41	20	12,500	9,700	12,000	25,000	3,300	13.20
42	35	30,000	27,600	4,052	49,750	18,098	36.37
43	27	14,000	17,500	12,500	38,000	8,000	21.05
44	26	7,000	13,340	6,796	24,274	4,138	17.04
45	14	5,000	6,000	7,500	16,000	2,500	15.62
46	10	10,000	7,800	2,500	25,000	14,700	58.80
47	25	12,000	13,000	15,000	40,000	12,000	30.00
48	136	275,000	80,000	60,000	250,000	110,000	44.00
49	270	200,000	152,588	300,000	500,000	47,412	9.49
50	90	20,000	52,000	100,000	160,000	8,000	5.00
51	60	50,000	39,600	18,000	75,000	17,400	23.20
52	5	6,000	5,200	3,500	15,000	6,300	42.00
53	14	8,000	7,000	10,000	30,000	13,000	43.33
54	11	1,500	5,200	1,200	8,000	1,600	20.00
55	20	20,000	5,000	18,000	30,000	7,000	23.33

PRINTING AND PUBLISHING.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$66,400	\$183,600	9.09	45.46	12.07	33.38	\$1,049	\$350 00	\$477	1
9,339	4,184	38.91	41.60	13.46	6.03	1,217	73 00	506	2
18,430	—11,101	56.10	38.01	14.82	—8.93	994	—88 00	377	3
19,500	—17,600	15.45	83.34	12.50	—11.29	547	—61 00	456	4
4,236	3,016	34.37	41.75	13.95	9.93	820	81 00	342	5
4,618	5,883	28.87	43.77	12.03	15.33	799	120 00	350	6
4,389	2,001	26.00	50.92	15.85	7.23	1,025	74 00	522	7
1,800	2,400	10.83	54.17	15.00	20.00	705	141 00	382	8
2,360	3,010	25.00	48.15	11.80	15.05	833	125 00	401	9
3,340	8,460	32.00	20.80	13.36	33.84	1,086	367 00	226	10
1,780	2,020	27.69	43.08	13.69	15.54	1,083	168 00	466	11
2,400	7,064	14.78	32.65	13.33	39.24	1,636	642 00	534	12
2,350	—100	48.28	36.21	16.20	—69	1,450	—10 00	525	13
1,491	—13	24.15	61.23	14.75	—13	1,010	—1 30	618	14
1,700	—700	21.43	71.43	12.14	—5.00	823	—41 00	588	15
3,200	4,000	34.78	33.92	13.91	17.39	1,150	200 00	390	16
6,100	7,900	37.50	27.50	15.25	19.75	1,904	376 00	523	17
1,960	760	37.50	45.50	12.25	4.75	888	42 00	204	18
3,000	—	40.74	48.15	11.11	—	1,000	—	481	19
6,200	3,800	30.00	50.00	12.40	7.60	1,562	118 00	781	20
4,000	9,300	5.45	34.10	18.18	42.27	814	344 00	277	21
2,260	3,340	22.89	43.38	13.61	20.12	888	185 00	400	22
1,500	1,100	29.63	51.11	11.11	8.15	843	68 00	431	23
13,591	16,286	20.61	54.06	11.52	13.81	1,965	271 00	1,062	24
27,700	—19,700	63.14	33.18	12.76	—9.08	1,427	—129 00	473	25
1,827	2,747	21.62	41.10	14.89	22.39	395	88 00	162	26
3,600	5,400	40.00	30.00	12.00	18.00	1,666	300 00	500	27
1,542	2,678	35.02	35.31	10.84	18.83	888	167 00	313	28
5,100	6,500	48.89	25.34	11.33	14.44	2,250	325 00	570	29
8,400	30,600	13.33	34.67	11.20	40.80	3,000	1,224 00	1,040	30
1,800	5,492	18.06	33.33	12.00	36.61	1,363	499 00	454	31
3,220	780	24.00	60.00	12.88	3.12	657	20 00	394	32
5,600	26,400	20.00	16.00	11.20	52.80	2,777	1,466 00	444	33
3,900	—770	46.67	42.90	13.00	—2.57	5,000	—12 00	214	34
9,900	5,100	40.00	40.00	13.20	6.80	681	46 00	272	35
6,800	6,800	26.00	46.80	13.60	13.60	500	68 00	234	36
1,300	2,100	6.00	60.00	13.00	21.00	769	161 00	461	37
1,800	1,400	8.34	65.00	15.00	11.66	315	36 00	205	38
1,410	790	16.67	65.00	11.75	6.58	800	52 00	520	39
3,510	2,940	46.30	29.82	13.00	10.88	1,080	117 00	310	40
3,250	50	48.00	38.80	13.00	.20	1,250	250 00	485	41
6,775	11,323	8.15	55.48	13.61	22.76	1,421	323 00	788	42
4,640	3,360	32.90	46.05	12.21	8.84	1,407	124 00	648	43
2,847	1,291	28.00	54.96	11.72	5.32	933	49 00	513	44
1,900	600	46.88	37.50	11.87	3.75	1,142	42 00	428	45
3,100	11,600	10.00	31.20	12.40	46.40	2,500	1,160 00	780	46
4,720	7,280	37.50	32.50	11.80	18.20	1,600	291 00	520	47
41,500	68,500	24.00	32.00	16.60	27.40	1,838	503 00	588	48
62,000	—14,588	60.00	30.51	12.40	—2.91	1,851	—54 00	565	49
17,200	—9,200	62.50	32.50	10.75	—5.75	1,777	—102 00	577	50
10,500	6,900	24.00	52.80	14.00	9.20	1,250	115 00	660	51
1,860	4,440	23.33	34.67	12.40	29.60	3,000	888 00	1,040	52
3,480	9,520	33.34	23.33	11.60	31.73	2,142	680 00	500	53
890	710	15.00	65.00	11.12	8.88	727	64 00	472	54
4,200	2,800	60.00	16.67	14.00	9.33	1,500	140 00	250	55

PRINTING AND PUBLISHING — Concluded.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
56	30	\$50,000	\$13,625	\$15,000	\$50,000	\$21,375	42.75
57	30	5,000	15,600	12,000	36,000	8,400	23.33
58	8	10,500	5,076	4,500	25,500	15,924	62.44
59	100	225,000	94,468	36,865	207,000	75,667	36.55
60	50	12,000	20,800	12,000	37,000	4,200	11.35
61	80	80,000	72,000	40,000	150,000	38,000	25.33
62	75	50,000	36,400	25,000	75,000	13,600	18.13
63	15	2,500	5,000	1,500	10,000	3,500	35.00
64	35	18,000	20,800	20,929	62,000	20,271	32.69
65	20	12,000	7,151	8,000	27,000	11,849	43.89
66	24	9,000	12,500	2,400	20,000	5,100	25.50
67	35	15,000	18,200	25,000	50,000	6,800	13.60
68	18	30,000	17,000	25,000	90,000	48,000	53.33
69	63	30,000	47,250	77,500	173,600	48,850	28.14
70	57	37,128	25,075	18,000	50,959	7,884	15.47
71	12	3,000	6,500	30,000	50,000	13,500	27.00
72	19	15,000	8,000	12,000	25,000	5,000	20.00
73	18	50,000	11,700	25,000	42,000	5,300	12.62
74	14	3,500	5,720	3,500	10,500	1,280	12.19
75	14	3,000	5,000	2,500	10,000	2,500	25.00
76	12	5,000	5,500	1,500	10,300	3,300	32.04
77	12	10,000	5,250	3,600	18,000	9,150	50.83
78	75	110,000	67,995	17,134	119,903	34,774	28.99
79	17	30,000	7,858	10,000	28,000	10,142	36.21
80	12	4,000	5,000	4,000	12,500	3,500	28.00
81	130	50,000	53,000	50,000	130,000	27,000	20.76
82	36	15,000	18,500	12,000	50,000	19,500	39.00
83	100	25,000	55,000	15,000	100,000	30,000	30.00
84	20	7,000	9,000	3,500	15,500	3,000	19.35
85	20	20,000	14,000	3,000	26,000	9,000	34.61
86	10	3,000	5,100	2,000	9,500	2,400	25.26
87	17	5,000	7,800	1,800	10,600	1,000	9.43
88	33	27,000	19,000	30,000	57,000	8,000	14.03
89	300	235,000	225,000	205,000	700,000	270,000	38.57
90	14	5,000	6,700	7,500	35,000	20,800	59.42
91	60	40,000	21,152	60,599	94,179	12,428	13.19
92	450	175,000	190,193	268,960	542,861	83,708	15.41
93	15	30,000	10,500	3,000	30,000	16,500	55.00
94	10	10,000	6,500	5,000	18,000	6,500	36.11
95	6	10,000	5,200	3,500	12,000	3,300	27.50
96	30	15,000	18,200	10,000	35,000	6,800	19.43
97	30	20,000	16,224	15,180	39,400	7,996	20.29
98	60	125,000	60,000	64,800	256,000	131,200	51.25
99	22	100,000	11,000	19,000	70,000	40,000	57.14
100	100	60,000	87,152	44,000	193,969	62,817	32.38

RUBBER AND ELASTIC GOODS.

1	200	\$200,000	\$60,000	\$262,836	\$461,257	\$138,421	30.00
2	16	6,000	7,500	8,300	20,000	4,200	21.00
3	48	50,000	13,500	53,000	80,000	13,500	16.87
4	103	75,000	30,000	75,000	150,000	45,000	30.00
5	39	15,000	8,300	32,000	40,000	—300	—7.5

PRINTING AND PUBLISHING — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$8,000	\$13,375	30.00	27.25	16.00	\$26.75	\$1,666	\$445 00	\$454	56
3,900	4,500	33.34	43.33	10.83	12.50	1,200	150 00	520	57
3,180	12,744	17.65	19.91	12.47	49.97	3,187	1,593 00	634	58
34,200	41,467	17.81	45.64	16.52	20.03	2,070	414 00	944	59
4,420	—220	32.43	56.22	11.94	—59	740	—1 40	416	60
19,800	18,200	26.67	48.00	13.20	12.13	1,875	227 00	900	61
10,500	3,100	33.33	48.54	14.00	4.13	1,000	41 00	485	62
1,150	2,350	15.00	50.00	11.50	23.50	666	156 00	333	63
7,280	12,991	33.76	33.55	11.74	20.95	1,771	371 00	594	64
3,420	8,429	29.63	26.48	12.67	31.22	1,350	421 00	357	65
2,540	2,560	12.00	62.50	12.70	12.80	833	106 00	520	66
5,900	900	50.00	36.40	11.80	1.80	1,428	25 00	520	67
10,800	37,200	27.78	18.89	12.00	41.33	5,000	2,066 00	944	68
19,160	29,690	44.64	27.22	11.04	17.10	2,755	470 00	750	69
7,324	560	35.33	49.20	14.37	1.10	894	9 82	439	70
5,180	8,320	60.00	13.00	10.36	16.64	4,166	693 00	541	71
3,400	1,600	48.00	32.00	13.60	6.40	1,315	84 00	421	72
7,200	—1,900	59.52	27.86	17.14	—4.52	2,333	—105 00	650	73
1,260	20	33.33	54.48	12.00	.19	750	142 00	408	74
1,180	1,320	25.00	50.00	11.80	13.20	714	94 00	357	75
1,330	1,970	14.57	53.39	12.91	19.13	858	164 00	458	76
2,400	6,750	20.00	29.17	13.33	37.50	1,500	562 00	437	77
18,590	16,184	14.30	56.71	15.50	13.49	1,598	215 00	906	78
4,600	5,542	35.72	28.07	16.42	19.79	1,647	326 00	462	79
1,490	2,010	32.00	40.00	11.92	16.08	1,041	167 00	416	80
16,000	11,000	38.47	40.77	12.30	8.46	1,000	84 00	407	81
5,900	13,600	24.00	37.00	11.80	27.20	1,388	377 00	513	82
11,500	18,500	15.00	55.00	11.50	18.50	1,000	185 00	550	83
1,970	1,030	22.58	58.07	12.70	6.65	775	51 00	450	84
3,800	5,200	11.54	53.85	14.61	20.00	1,300	260 00	700	85
1,130	1,270	21.05	53.69	11.89	13.37	950	127 00	510	86
1,360	—360	16.98	73.59	12.83	—3.40	623	—21 00	458	87
7,320	680	52.63	33.34	12.84	1.19	1,727	20 00	575	88
84,100	185,900	29.29	32.14	12.01	26.56	2,333	619 00	750	89
3,800	17,000	21.43	19.15	10.85	48.57	2,500	1,214 00	478	90
11,818	610	64.35	22.46	12.54	65	1,569	10 00	352	91
64,786	18,922	49.55	35.04	11.93	3.48	1,206	42 00	422	92
4,800	11,700	10.00	35.00	16.00	39.00	2,000	713 00	700	93
2,400	4,100	27.77	36.12	13.33	22.78	1,800	410 00	650	94
1,800	1,500	29.17	43.33	15.00	12.50	2,000	250 00	866	95
4,400	2,400	28.57	52.00	12.57	6.86	1,166	80 00	606	96
5,140	2,856	38.53	41.18	13.04	7.25	1,313	95 00	540	97
33,100	98,100	25.31	23.44	12.93	38.32	4,266	1,635 00	1,000	98
13,000	27,000	27.14	15.72	18.57	38.57	3,181	1,227 00	500	99
22,997	39,820	22.69	44.93	11.85	20.53	1,939	398 00	871	100

RUBBER AND ELASTIC GOODS.

\$58,126	\$80,295	56.99	13.01	12.60	17.40	\$2,306	\$401 00	\$300	1
2,360	1,840	41.50	37.50	11.80	9.20	1,250	115 00	468	2
11,000	2,500	66.25	16.88	13.75	3.12	1,666	52 00	281	3
19,500	25,500	50.00	20.00	13.00	17.00	1,456	247 00	291	4
4,900	—5,200	80.00	20.75	12.25	—13.00	1,025	—133 00	212	5

RUBBER AND ELASTIC GOODS — Concluded.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit or value of product.
6	60	\$30,000	\$24,750	\$30,000	\$100,000	\$45,250	45.25
7	16	50,000	10,000	55,000	80,000	15,000	18.75
8	75	100,000	36,000	150,000	225,000	39,000	17.33
9	125	75,000	52,000	100,000	170,000	18,000	10.58
10	50	20,000	16,000	45,000	75,000	14,000	18.66
11	130	50,000	55,000	145,000	250,000	50,000	20.00
12	80	20,000	18,000	100,000	125,000	7,000	5.60
13	235	50,000	80,000	200,000	350,000	70,000	20.00
14	48	40,000	7,905	48,494	66,509	10,110	15.20
15	122	75,000	25,000	111,000	175,000	39,000	22.28
16	235	300,000	60,000	224,124	284,000	—124	— .04
17	207	150,000	91,425	210,972	383,982	81,585	21.24
18	411	383,000	107,212	331,769	557,543	118,562	21.26
19	40	150,000	19,326	328,163	398,925	51,436	12.89
20	73	50,000	17,000	30,000	50,000	3,000	6.00
21	35	25,000	12,000	350,000	400,000	38,000	9.50
22	23	8,000	7,500	36,000	60,000	16,500	27.50
23	45	25,000	15,952	51,804	77,682	9,926	12.77
24	213	40,000	42,302	45,000	98,600	11,298	11.45
25	15	10,000	7,700	50,000	100,000	42,300	42.30

STONE.

1	6	\$1,000	\$5,200	\$4,000	\$11,000	\$1,800	16.36
2	22	50,000	12,000	4,000	20,000	4,000	20.00
3	10	20,000	5,000	3,000	10,000	2,000	20.00
4	8	1,000	5,000	3,000	9,500	1,500	15.78
5	20	6,000	6,000	7,500	15,000	1,500	10.00
6	20	5,000	9,000	9,300	27,000	8,700	32.22
7	14	3,000	8,400	2,400	16,500	5,700	34.54
8	15	10,000	6,600	3,500	16,300	6,200	38.03
9	10	10,000	8,000	8,000	25,000	9,000	36.00
10	17	10,000	9,000	7,000	25,000	9,000	36.00
11	15	3,000	5,000	800	10,000	4,200	42.00
12	6	5,000	5,500	2,000	8,000	500	6.25
13	25	5,000	8,000	5,000	15,000	2,000	13.33
14	21	3,000	5,000	7,000	15,000	3,000	20.00
15	30	5,500	18,000	12,000	33,000	3,000	9.09
16	20	26,880	13,500	9,000	26,000	3,500	13.46
17	70	100,000	30,000	70,000	140,000	40,000	28.57
18	6	2,000	6,188	3,500	12,500	2,812	22.49
19	15	4,000	10,500	20,000	70,000	39,500	56.42
20	30	15,000	20,000	10,000	40,000	10,000	25.00
21	30	2,000	18,000	15,000	40,000	7,000	17.50
22	23	1,000	12,000	10,000	30,000	8,000	26.66
23	7	2,500	6,500	10,000	20,000	3,500	17.50
24	60	40,000	24,000	24,000	63,000	15,000	23.80
25	100	27,000	23,600	5,000	35,000	6,400	18.28
26	27	100,000	16,000	110,000	130,000	4,000	3.08
27	130	150,000	50,000	150,000	250,000	50,000	20.00
28	20	5,000	12,321	12,815	30,421	5,285	17.37
29	150	100,000	57,000	55,000	125,000	13,000	10.40
30	15	20,000	7,500	10,000	40,000	22,500	56.25

RUBBER AND ELASTIC GOODS — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$11,800	\$33,450	30.00	24.75	11.80	33.45	\$1,666	\$557 00	\$412	6
11,000	4,000	68.75	12.50	13.75	5.00	5,000	250 00	625	7
28,500	10,500	66 67	16 00	12.66	4.67	3,000	140 00	480	8
21,500	-3,500	58.83	30.59	12 64	-2.06	1,360	-28 00	416	9
8,700	5,300	60.00	21.34	11.60	7.06	1,500	106 00	320	10
28,000	22,000	58.00	22.00	11.20	8 80	1,923	169 00	423	11
13,700	-6,700	80.00	14 40	10.96	-5 36	1,562	-83 00	225	12
38,000	32,000	57.14	22.86	10.85	9.15	1,489	136 00	340	13
9,051	1,059	72.92	11.89	13.60	1.59	1,385	22 00	164	14
22,000	17,000	63.43	14.29	12.57	9 71	1,434	139 00	204	15
46,400	-46,524	78.92	21.12	16.33	-16.37	1,208	-197 00	255	16
47,398	34,187	54.95	23.81	12.34	8.90	1,854	165 00	441	17
78,734	39,828	59.51	19.23	14.11	7.15	1,356	96 00	260	18
48,893	2,543	82.26	4.85	12.25	.64	9,973	63 00	483	19
8,000	-5,000	60.00	34.00	16.00	-10.00	684	-68 00	232	20
41,500	-3,500	87.50	3 00	10 37	- 87	11,428	-100 00	342	21
6,480	10,020	60.00	12 50	10.80	16.70	2,608	435 00	326	22
9,268	658	66.69	20.54	11.93	.84	1,726	14 00	354	23
12,260	-962	45.63	42.92	12.43	-.98	462	-4 51	198	24
10,600	31,700	50.00	7.70	10.60	31.70	6,666	2,113 00	513	25

STONE.

\$1,160	\$640	36 37	47.27	10.54	5 82	\$1,833	\$106 00	\$866	1
5,000	-1,000	20.00	60.00	25.00	-5.00	909	-45 00	536	2
2,200	-200	30.00	50.00	22.00	-2 00	1,000	-20 00	500	3
1,010	490	31 58	52.64	10.63	5.15	1,187	61 00	625	4
1,860	-360	50.00	40.00	12.40	-2.40	750	-18 00	300	5
3,000	5,700	34.45	33.33	11.11	21.11	1,350	285 00	450	6
1,830	3,870	14.55	50.91	11.09	23.45	1,178	276 00	600	7
2,230	3,970	21.48	40.49	13.68	24.35	1,086	264 00	440	8
3,100	5,900	32.00	32.00	12.40	23.60	2,500	590 00	800	9
3,100	5,900	28.00	36.00	12.40	23.60	1,470	347 00	529	10
1,180	3,020	8.00	50.00	11.80	30.20	666	201 00	333	11
1,000	-600	25.00	68 75	13.75	-7.50	1,333	-100 00	916	12
1,800	200	33.33	53 34	12.00	1.33	600	8 00	320	13
1,680	1,320	46 67	33.33	11.20	8.80	714	62 00	238	14
3,630	-630	36.36	54.55	11.00	-1.91	1,100	-21 00	600	15
4,213	-713	34.62	51.92	16.20	-2.74	1,306	-35 00	675	16
20,000	20,000	50.00	21.43	14.29	14 28	2,000	285 00	428	17
1,370	1,442	28 00	49.51	10.96	11.53	2,083	240 00	1,031	18
7,240	32,260	28.58	15.00	10.34	46.08	4,666	2,150 00	700	19
4,900	5,100	25.00	50.00	12.25	12.75	1,333	170 00	666	20
4,120	2,880	37.50	45.00	10.30	7.20	1,333	96 00	600	21
3,060	4,940	33.34	40.00	10.20	16.46	1,304	214 00	521	22
2,150	1,350	50.00	32.50	10.75	6.75	2,857	192 00	928	23
8,700	6,300	38.10	38.10	13 80	10 00	1,050	105 00	400	24
5,120	1,280	14.29	67.43	14.62	3.66	350	47 00	236	25
19,000	-15,000	84.61	12.31	14.61	-11.53	4,814	-555 00	292	26
34,000	16,000	60.00	20.00	13.60	6.40	1,923	123 00	284	27
3,342	1,943	42.13	40.50	10.98	6.39	1,521	97 00	616	28
18,500	-5,500	44.00	45.60	14.80	-4.40	833	-36 00	380	29
5,200	17,300	25.00	18.75	13.00	43.25	2,666	1,153 00	500	30

STONE — Concluded.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
31	160	\$90,000	\$15,000	\$82,000	\$236,000	\$109,000	46.18
32	45	50,000	24,000	18,000	50,000	8,000	16.00
33	50	30,000	12,000	8,000	36,000	16,000	44.44
34	20	12,000	7,200	2,500	22,000	12,300	55.90
35	20	5,000	11,000	600	15,000	3,400	22.66
36	50	46,000	15,700	1,700	40,000	22,600	56.50
37	50	30,000	23,000	15,000	51,000	13,000	25.49
38	15	2,500	8,300	3,000	16,550	5,250	31.72
39	10	3,500	6,000	2,500	15,000	6,500	43.33
40	9	700	5,000	1,200	10,000	3,800	38.00

TOBACCO.

1	19	\$8,000	\$10,400	\$10,200	\$21,600	\$1,000	4.63
2	7	2,000	5,000	5,000	10,000	—	—
3	20	15,000	7,000	2,500	15,000	5,500	36.66
4	45	25,000	25,000	50,600	84,450	8,850	10.48
5	35	25,000	18,000	73,000	100,000	9,000	9.00
6	12	8,000	6,856	8,225	20,200	5,119	25.34
7	24	30,000	14,400	20,000	36,800	2,400	6.53
8	80	25,000	27,455	61,025	108,325	19,845	18.31
9	10	1,500	5,000	12,500	20,000	2,500	12.50
10	104	140,000	44,355	125,000	200,000	30,645	15.32
11	17	5,000	6,448	17,640	25,188	1,100	4.37
12	60	10,000	22,000	35,000	70,000	13,000	18.57
13	15	8,000	7,000	9,000	22,000	6,000	27.27
14	7	25	5,000	3,500	10,500	2,000	19.04
15	11	1,000	5,000	7,000	13,500	1,500	11.11
16	13	20,000	8,923	17,040	31,300	5,337	17.05
17	12	20,000	7,000	14,000	25,000	4,000	16.00
18	25	5,000	13,500	14,300	52,000	24,200	46.53
19	8	2,000	6,000	2,800	12,500	3,700	29.60
20	35	8,000	13,600	24,000	45,000	7,400	16.44
21	30	20,000	15,600	27,000	50,000	7,400	14.80
22	15	3,000	5,000	4,000	12,000	3,000	25.00
23	17	4,000	7,087	19,750	31,500	4,663	14.80
24	8	2,000	5,000	2,500	11,000	3,500	31.81
25	205	200,000	36,031	94,183	166,538	36,324	21.81
26	14	1,000	8,000	9,504	19,440	1,936	9.95
27	24	9,000	6,758	28,000	37,100	2,342	6.31
28	22	15,000	6,311	31,860	39,140	969	2.47
29	10	4,000	7,000	16,000	25,000	2,000	8.00
30	9	6,500	5,500	8,750	15,000	750	5.00

WOODEN GOODS.

1	19	\$20,000	\$7,500	\$15,000	\$25,000	\$2,500	10.00
2	18	3,000	12,000	20,000	35,000	3,000	8.57
3	35	17,000	12,000	51,000	67,000	4,000	5.97
4	135	20,000	50,000	20,000	75,000	5,000	6.66
5	32	1,200	18,000	34,000	70,000	18,000	25.71

STONE — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$29,000	\$80,000	34.75	19.07	12.28	33.90	\$1,475	\$500 00	\$281	31
8,000	-	36.00	48.00	16.00	-	1,111	-	533	32
5,400	10,600	22.22	33.34	15.00	29.44	720	212 00	240	33
2,920	9,380	11.37	32.73	13.27	42.63	1,110	469 00	360	34
1,800	1,600	4.00	73.34	12.00	10.66	750	80 00	550	35
6,760	15,840	4.25	39.25	16.90	39.60	800	316 00	314	36
6,900	6,100	29.41	45.10	13.52	11.97	1,020	122 00	460	37
1,805	3,445	18.13	50.15	10.90	20.82	1,103	229 00	620	38
1,710	4,790	16.67	40.00	11.40	31.93	1,500	479 00	600	39
1,042	2,758	12.00	50.00	10.42	27.58	1,111	306 00	555	40

TOBACCO.

\$2,640	—\$1,640	47.22	48.15	12.22	—7.59	\$1,136	—\$86 00	\$547	1
1,120	—1,120	50.00	50.00	11.20	—11.20	1,428	—160 00	714	2
2,400	3,100	16.67	46.67	16.00	20.66	750	155 00	350	3
9,945	—1,095	59.92	29.60	11.77	—1.29	1,876	—24 00	555	4
11,500	—2,500	73.00	19.00	11.50	—2.50	2,857	—71 00	314	5
2,500	2,619	40.72	33.94	12.38	12.96	1,683	218 00	571	6
5,480	—3,080	54.34	39.13	14.89	—8.36	1,533	—128 00	600	7
12,333	7,512	56.34	25.35	11.38	6.93	1,354	93 00	343	8
2,090	410	62.50	25.00	10.45	2.05	2,000	41 00	500	9
28,400	2,245	62.50	22.18	14.20	1.12	1,923	21 00	426	10
2,819	—1,719	70.03	25.60	11.19	—6.82	1,481	—101 00	379	11
7,600	5,400	50.00	31.43	10.86	7.71	1,166	90 00	366	12
2,680	3,320	40.91	31.82	12.18	15.09	1,466	221 00	466	13
1,052	948	33.34	47.62	10.02	9.02	1,500	135 00	714	14
1,410	90	51.85	37.04	10.44	.67	1,227	8 18	454	15
4,330	1,007	54.44	28.51	13.83	3.22	2,407	77 00	686	16
3,700	300	56.00	28.00	14.80	1.20	2,083	25 00	583	17
5,500	18,700	27.50	25.97	10.57	35.96	2,080	748 00	510	18
1,370	2,330	22.40	48.00	10.96	18.64	1,562	291 00	750	19
4,980	2,420	53.34	30.22	11.06	5.38	1,285	69 00	388	20
6,200	1,200	54.00	31.20	12.40	2.40	1,666	40 00	520	21
1,380	1,620	33.33	41.67	11.50	13.50	800	108 00	333	22
3,390	1,273	62.70	22.50	10.76	4.04	1,852	74 00	416	23
1,220	2,280	22.73	45.46	11.09	20.72	1,375	285 00	625	24
28,654	7,670	56.55	21.64	17.21	4.60	812	37 00	175	25
2,004	—68	48.89	41.16	10.30	—35	1,388	—4 85	571	26
4,250	—1,908	75.47	18.22	11.45	—5.14	1,545	—79 00	281	27
4,814	—3,845	81.40	16.13	12.29	—9.82	1,779	—174 00	286	28
2,740	—740	64.00	28.00	10.96	—2.96	2,500	—74 00	700	29
1,890	—1,140	58.33	36.67	12.60	—7.60	500	—38 00	183	30

WOODEN GOODS.

\$3,700	—\$1,200	60.00	30 00	14.80	—4.80	\$1,315	—\$63 00	\$394	1
3,680	—680	57.14	34.29	10.51	—1.94	1,944	—37 00	666	2
7,720	—3,720	76.12	17.91	11.52	—5.55	1,914	—106 00	342	3
8,700	—3,700	26.67	66.67	11.60	—4.94	555	—27 00	370	4
7,072	10,928	48.57	25.72	10.10	15.61	2,187	341 00	562	5

STATISTICS OF LABOR.

WOODEN GOODS — Continued.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
6	34	\$5,000	\$14,000	\$13,000	\$30,000	\$3,000	10.00
7	12	2,000	7,000	3,000	13,000	3,000	23.07
8	30	60,000	12,000	10,000	30,000	8,000	26.66
9	20	16,000	9,600	20,000	40,000	10,400	26.00
10	30	70,000	13,500	20,000	40,000	6,500	16.25
11	87	75,000	26,500	33,560	69,420	9,360	13.48
12	15	5,000	8,550	10,000	22,000	3,450	15.67
13	26	15,000	7,500	18,089	28,641	3,052	10.65
14	20	26,500	19,000	15,518	45,378	10,860	23.93
15	10	30,000	5,473	6,600	20,000	7,927	39.63
16	10	30,000	6,750	10,000	21,250	4,500	21.17
17	21	4,000	10,642	21,000	34,492	2,850	8.26
18	25	30,000	13,041	45,670	68,590	9,879	14.40
19	13	5,000	5,000	12,000	18,000	1,000	5.55
20	20	35,000	9,000	31,000	42,000	2,000	4.76
21	45	50,000	19,200	31,500	53,100	2,400	4.52
22	790	1,000,000	222,000	355,000	637,000	60,000	9.42
23	25	18,000	12,000	35,000	76,000	29,000	38.15
24	28	40,000	14,400	75,000	91,000	1,600	1.76
25	10	5,000	5,200	2,500	15,000	7,300	48.66
26	33	10,000	18,000	50,000	74,000	6,000	8.10
27	60	35,000	30,000	20,000	80,000	30,000	37.50
28	7	4,000	5,000	3,000	14,000	6,000	42.85
29	9	10,000	5,000	1,000	10,000	4,000	40.00
30	19	15,000	10,000	12,000	25,000	3,000	12.00
31	12	3,000	6,000	3,500	11,000	1,500	13.63
32	10	12,000	6,000	2,000	17,000	9,000	52.94
33	30	20,000	10,500	24,000	40,000	5,500	13.75
34	25	30,000	9,000	25,900	38,900	4,000	10.28
35	35	70,000	10,160	49,808	94,193	34,225	36.33
36	70	50,000	14,000	35,000	60,000	11,000	18.33
37	36	10,000	14,352	10,764	30,141	5,025	16.67
38	11	10,000	5,000	40,000	60,000	15,000	25.00
39	16	10,000	9,000	18,000	30,000	3,000	10.00
40	45	20,000	20,000	15,000	45,000	10,000	22.22
41	10	5,000	5,000	8,500	16,000	2,500	15.62
42	18	5,000	5,610	11,050	18,720	2,060	11.00
43	28	10,000	8,975	7,673	27,967	11,319	40.47
44	40	10,000	25,000	60,000	100,000	15,000	15.00
45	15	4,000	7,000	12,000	30,000	11,000	36.66
46	10	2,000	6,000	1,000	8,000	1,000	12.50
47	11	9,000	6,312	12,000	25,000	6,688	26.75
48	15	30,000	7,000	33,000	43,000	3,000	6.97
49	16	5,000	10,000	15,000	30,000	5,000	16.66
50	15	6,500	10,000	6,000	25,000	9,000	36.00
51	25	5,000	7,500	14,200	23,000	1,300	5.65
52	85	150,000	42,000	132,000	195,000	21,000	10.76
53	35	53,067	14,157	33,866	50,000	1,977	3.95
54	9	8,000	5,020	1,600	9,000	2,380	26.44
55	20	20,000	10,400	12,000	36,000	13,600	37.77
56	10	2,000	6,000	10,000	20,000	4,000	20.00
57	22	2,000	8,216	3,000	13,000	1,784	13.72
58	14	15,000	6,500	75,000	100,000	18,500	18.50
59	15	15,000	10,000	6,000	20,000	4,000	20.00
60	20	7,000	13,000	53,000	75,000	9,000	12.00

WOODEN GOODS — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used or value of product.	Percentage of wages paid or value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$3,300	—\$300	43.33	46.67	11.00	—1.00	\$882	—\$8 82	\$111	6
1,420	1,580	23.08	53.87	10.92	12.15	1,083	131 00	583	7
6,600	1,400	33.34	40 00	22.00	4.66	1,000	46 00	400	8
4,960	5,440	50.00	24 00	12 40	13.60	2,000	272 00	480	9
8,200	—1,700	50.00	33.75	20.50	—4.25	1,333	—56 00	450	10
11,442	—2,082	48.34	38.18	16.48	—3.00	797	—23 00	316	11
2,500	950	45 46	38.87	11.36	4.31	1,466	63 00	570	12
3,764	—712	63.16	26.19	13.14	—2.49	1,101	—27 00	288	13
6,128	4,732	34.20	41.87	13.50	10.43	2,268	236 00	950	14
3,800	4,127	33.00	27.37	19.00	20.63	2,000	412 00	547	15
3,925	575	47.06	31.77	18 47	2.70	2,125	57 00	675	16
3,689	—839	60.89	30.85	10.69	—2.43	1,642	—39 00	506	17
8,659	1,220	66.59	19.01	12 62	1.78	2,743	48 00	521	18
2,100	—1,100	66 67	27.78	11.66	—6.11	1,384	—84 00	384	19
6,300	—4,300	73.81	21.43	15.00	—10.24	2,100	—215 00	450	20
8,310	—5,910	59.32	36.16	15.64	—11.12	1,180	—131 00	426	21
123,700	—63,700	55.73	34.85	19.42	—10.00	806	—80 00	281	22
8,680	20,326	46 06	15.79	11.42	26.73	3,040	812 00	480	23
11,500	—9,900	82.42	15.82	12.63	—10.87	3,250	—353 00	514	24
1,800	5,500	16.67	34.67	12.00	36.66	1,500	550 00	520	25
8,000	—2,000	67.57	24.33	10.80	—2.70	2,242	—60 00	545	26
10,100	19,900	25.00	37 50	12.62	24.88	1,333	331 00	500	27
1,640	4,360	21.43	35.72	11.71	31.14	2,000	622 00	714	28
1,600	2,400	10.00	50.00	16.00	24.00	1,111	266 00	555	29
3,400	—100	48.00	40.00	13.60	—1.60	1,315	—21 00	526	30
1,280	220	31.82	54.55	11.63	2.00	916	18 00	500	31
2,420	6,580	11.77	35.29	14.23	38.71	1,700	658 00	600	32
5,200	300	60.00	26.25	13.00	.75	1,333	10 00	350	33
5,690	—1,690	66.59	23.13	14.62	—4.34	1,556	—67 00	360	34
13,619	20,606	52.88	10.79	14.45	21.88	2,691	588 00	290	35
9,000	2,000	58.34	23.33	15.00	3.33	857	28 00	200	36
3,614	1,411	35.71	47.62	11.99	4.68	837	39 00	398	37
6,600	8,400	66.67	8.33	11.00	14.00	5,454	763 00	454	38
3,600	—600	60.00	30.00	12.00	—2.00	1,875	—37 00	562	39
5,700	4,300	33.33	44.45	12.66	9.56	1,000	95 00	444	40
1,900	600	53.13	31.25	11.87	3.75	1,600	60 00	500	41
2,172	—112	59.03	29.97	11.60	—60	1,040	—6 22	311	42
3,397	7,922	27.44	32.09	12 14	28.33	998	282 00	320	43
10,600	4,400	60.00	25.00	10.60	4.40	2,500	110 00	625	44
3,240	7,760	40 00	23.34	10.80	25.86	2,000	517 00	466	45
920	80	12.50	75.00	11.50	1 00	800	8 00	600	46
3,040	3,648	48.00	25.25	12.16	14.59	2,272	331 00	573	47
6,100	—3,100	76 75	16.28	14.18	—7.21	2,866	—206 00	466	48
3,300	1,700	50.00	33.34	11.00	5.66	1,872	106 00	625	49
2,890	6,110	24 00	40.00	11.56	24.44	1,666	407 00	666	50
2,600	—1,300	61.74	32.61	11.30	—5.65	920	—52 00	300	51
28,500	—7,500	67 70	21.54	14.61	—3.85	2,294	—88 00	494	52
8,184	—6,207	67.73	28.32	16.36	—12.41	1,428	—177 00	404	53
1,380	1,000	17.78	55.78	15.33	11.11	1,000	111 00	556	54
4,800	8,800	33.34	28.89	13 33	24.44	1,800	440 00	520	55
2,120	1,880	50.00	30.00	10.50	9.40	2,000	188 00	600	56
1,420	364	23.08	63.20	10.92	2.80	590	16 00	373	57
10,900	7,600	75.00	6.50	10.90	7.60	7,142	512 00	464	58
2,900	1,100	30.00	50.00	14.50	5.50	1,333	73 00	666	59
7,920	1,080	70.67	17.33	10.56	1.44	3,750	54 00	650	60

STATISTICS OF LABOR.

WOODEN GOODS — Concluded.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
61	10	\$25,000	\$6,200	\$51,000	\$60,000	\$2,800	4.66
62	15	7,000	10,400	12,000	26,000	3,600	13.84
63	13	3,600	5,200	12,000	24,000	6,800	28.33
64	15	1,000	6,500	12,000	25,000	6,500	26.00
65	12	3,000	5,000	5,000	12,000	2,000	16.66
66	45	1,500	10,000	36,000	61,000	15,000	24.59
67	10	10,000	5,000	20,000	30,000	5,000	16.66
68	18	4,000	5,184	4,000	14,400	5,216	36.22
69	33	60,000	22,423	25,000	50,000	2,577	5.15
70	6	5,000	5,700	3,000	10,000	1,300	13.00

WOOLLEN GOODS.

1	72	\$50,000	\$20,000	\$53,640	\$90,500	\$16,860	18.63
2	79	125,000	30,000	178,050	223,775	15,725	7.02
3	148	300,000	53,000	413,675	613,000	146,325	23.87
4	154	125,000	50,000	389,000	500,000	61,000	12.20
5	118	150,000	41,098	141,290	289,368	106,980	36.97
6	363	400,000	110,000	495,100	760,000	154,900	20.38
7	630	1,200,000	275,000	625,836	978,578	77,742	7.94
8	833	1,225,510	246,084	796,638	1,244,520	201,798	16.21
9	179	300,000	36,352	286,880	376,277	53,045	14.09
10	347	150,000	94,000	291,275	758,850	373,575	49.23
11	89	100,000	28,000	184,555	300,000	87,445	29.15
12	138	100,000	40,800	198,540	393,000	153,660	39.10
13	46	40,000	15,600	92,270	151,200	43,330	28.66
14	936	1,000,000	300,000	1,177,625	2,175,000	697,375	32.06
15	77	100,000	28,047	171,356	230,500	31,097	13.49
16	224	250,000	82,167	282,880	450,000	84,953	18.88
17	49	35,000	17,000	15,375	50,000	17,625	35.25
18	28	10,000	8,000	4,000	30,000	18,000	60.00
19	103	120,000	40,000	182,350	288,000	65,650	22.79
20	130	133,500	33,473	154,489	240,000	52,038	21.68
21	115	60,000	42,000	202,120	316,000	71,880	22.75
22	95	100,000	26,303	99,496	183,317	57,518	31.38
23	264	200,000	74,597	218,978	371,306	77,731	20.93
24	208	200,000	55,136	199,036	324,220	70,048	21.60
25	55	8,000	11,000	36,888	79,062	31,174	39.42
26	214	150,000	60,000	265,000	550,000	225,000	40.91
27	101	100,000	37,291	254,200	325,000	33,509	10.31
28	317	310,000	102,000	326,224	700,000	271,776	38.82
29	190	250,000	65,000	194,000	290,000	31,000	10.68
30	257	350,000	81,431	240,989	463,444	141,024	30.43
31	281	300,000	80,000	275,000	450,000	95,000	21.11
32	61	75,000	18,000	95,100	124,800	11,700	9.36
33	70	75,000	20,000	77,000	175,000	78,000	44.57
34	153	50,000	45,000	140,905	300,000	114,095	38.03
35	49	20,000	14,500	41,970	55,000	—1,470	—2.67
36	182	225,000	64,594	198,599	400,000	136,807	34.20
37	190	300,000	72,000	298,565	398,450	27,885	6.99
38	153	50,000	50,000	167,680	245,000	27,320	11.15
39	140	60,000	60,000	240,000	400,000	100,000	25.00
40	167	150,000	54,000	318,325	400,000	27,675	6.91

WOODEN GOODS — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$7,500	—\$4,700	85.00	10.34	12.50	—7.84	\$6,000	—\$470 00	\$620	61
3,020	580	46.16	40.00	11.61	2.23	1,733	38 00	693	62
2,580	4,220	50.00	21.67	10.75	17.58	1,846	324 00	400	63
2,560	3,940	48.00	26 00	10.24	15.76	1,666	262 00	433	64
1,380	620	41.67	41.67	11.50	5.16	1,000	51 00	416	65
6,190	8,810	59.01	16.40	10.14	14.45	1,555	195 00	222	66
3,600	1,400	66.67	16.67	12.00	4.66	3,000	140 00	500	67
1,680	3,536	27.78	36.00	11.67	24.55	800	196 00	288	68
8,600	—6,023	50.00	44.85	17.20	—12.05	1,515	—182 00	679	69
1,300	—	30.00	57.00	13.00	—	1,666	—	950	70

WOOLLEN GOODS.

\$12,050	\$4,810	59.27	22.10	13.32	5.31	\$1,256	\$66 00	\$277	1
29,878	—14,153	79.57	13.41	13.35	—6.33	2,832	—179 00	379	2
79,300	67,025	67.49	8.64	12.93	10 94	4,141	452 00	358	3
57,500	3,500	77.80	10.00	11.50	.70	3,246	22 00	324	4
37,937	69 043	48.83	14.20	13.11	23.86	2,452	585 00	348	5
100,000	54,900	65.15	14.47	13.16	7.22	2,093	151 00	303	6
169,858	—92,116	63.96	28.18	17.35	—9.41	1,553	—146 00	436	7
197,983	3,815	64.01	19.78	15.90	.31	1,494	457 00	295	8
55,628	—2,583	76.25	9.66	14.78	—69	2,102	—14 00	203	9
84,885	288,690	38.38	12.39	11.19	38.04	2,186	831 00	270	10
36,000	51,445	61.52	9.33	12.00	17.15	3,370	578 00	314	11
45,300	108,360	50.52	10.38	11.53	27.57	2,847	785 00	295	12
17,520	25,810	61.02	10.32	11.59	17.07	326	561 00	339	13
277,500	419,875	54.15	13 79	12 75	19 31	2,323	448 00	320	14
23,650	7,447	74.34	12.17	10.26	3.23	2,993	96 00	364	15
60,000	24,953	62.86	18.26	13 33	5.55	2,068	111 00	366	16
7,100	10,525	30.75	34.00	14.20	21.05	1,020	214 00	346	17
3,600	14,400	13.33	26.67	12.00	48.00	1,071	514 00	285	18
36,000	29,650	63.32	13.89	12.50	10.29	2,737	287 00	388	19
32,010	20,028	64.37	13.95	13.33	8.35	1,846	154 00	257	20
35,200	36,680	63.96	13.29	11.14	11.61	2,747	318 00	365	21
24,332	33,186	54.27	14.35	13.28	18.10	1,929	349 00	276	22
49,131	28,600	58.97	20.10	13.23	7 70	1,406	108 00	282	23
44,422	25,626	61.39	17.01	13.70	7.90	1,558	123 00	265	24
8,386	22,788	46.66	13.92	10.60	28.82	1,437	414 00	200	25
64,000	161,000	48.18	10.91	11.64	29.27	2,570	732 00	280	26
38,500	—4,991	78.21	11.48	11.84	—1.53	3,217	—49 00	369	27
88,600	183,176	46.61	14.57	12.65	26.17	2,208	577 00	321	28
44,000	—13,000	66.90	22.42	15.17	—4.49	1,526	—68 00	342	29
67,344	73,680	52.00	17 57	14.53	15.90	1,803	286 00	316	30
63,000	32,000	61.11	17.78	14.00	7.11	1,601	113 00	284	31
16,980	—5,280	76.21	14.43	13.60	—4.24	2,045	—86 00	295	32
22,000	56,000	44.00	11.43	12.57	32.00	2,500	800 00	285	33
33,000	81,095	46.97	15.00	11.00	27.03	1,960	530 00	294	34
6,700	—8,170	76.31	26.36	12.18	—14.85	1,122	—166 00	295	35
53,500	83,307	49.65	16.15	13.37	20.83	2,197	457 00	354	36
57,845	—29,960	74.94	18.07	14.51	—7.52	2,097	—157 00	378	37
27,500	—180	68.44	20 41	11.22	—07	1,601	—117 00	326	38
43,600	56,400	60.00	15.00	10.90	14.10	2,857	402 00	428	39
49,000	—21,325	79.59	13.50	12.25	—5.34	2,395	—127 00	323	40

WOOLLEN GOODS — Continued.

ESTABLISHMENTS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
41	156	\$200,000	\$44,200	\$185,150	\$345,311	\$115,961	33.58
42	370	500,000	100,000	555,500	800,000	144,500	18.06
43	73	25,000	25,000	94,900	150,000	30,100	20.06
44	104	100,000	36,000	185,800	300,000	78,200	26.06
45	155	300,000	47,096	140,558	206,707	19,053	9.21
46	2,517	2,600,000	787,759	1,882,294	3,411,890	739,837	21.68
47	125	150,000	60,000	137,179	204,783	7,604	3.71
48	156	100,000	44,400	310,032	415,000	60,568	14.59
49	115	100,000	30,000	239,170	300,000	30,830	10.28
50	96	100,000	28,000	185,150	275,000	61,850	22.49
51	91	100,000	30,000	177,600	275,000	67,400	24.51
52	80	30,000	20,000	75,792	120,000	24,208	20.17
53	45	61,450	15,457	106,600	132,294	10,237	7.74
54	127	250,000	49,560	183,000	309,747	77,187	24.92
55	27	50,000	8,200	16,290	30,202	5,802	19.15
56	87	72,000	25,932	160,875	215,020	28,213	13.12
57	237	148,695	43,485	118,334	170,000	8,181	4.81
58	174	197,110	47,726	98,961	187,968	41,281	21.96
59	230	400,000	71,172	119,072	241,883	51,639	21.35
60	130	150,000	58,000	137,500	210,000	14,500	6.90
61	51	50,000	18,000	81,750	125,000	25,250	20.20
62	83	75,000	31,137	160,421	219,044	27,486	12.54
63	75	100,000	33,000	159,989	258,000	65,011	25.19
64	35	50,000	14,200	66,516	97,090	16,374	16.87
65	126	300,000	48,000	338,000	420,000	34,000	8.09
66	56	60,000	18,000	51,600	102,000	32,400	31.76
67	30	10,000	6,450	9,000	18,000	2,550	14.16
68	48	10,000	12,000	44,300	70,000	13,700	19.57
69	40	12,000	16,000	68,083	135,000	50,917	37.71
70	61	15,000	21,600	110,216	192,500	60,684	31.52
71	44	50,000	16,500	79,996	129,000	32,504	25.19
72	55	50,000	20,000	115,000	175,000	40,000	22.85
73	49	40,000	8,000	45,000	79,508	26,508	33.34
74	125	15,000	50,000	70,700	106,500	—14,206	-13.33
75	*1,200	10,000	12,000	29,200	60,200	19,000	31.56
76	108	100,000	18,000	46,875	75,000	10,125	13.50
77	110	120,000	40,000	174,500	275,000	60,500	22.00
78	128	70,000	50,000	106,550	175,000	18,450	10.54
79	105	57,000	29,000	102,500	165,000	33,500	20.30
80	702	450,000	163,897	558,880	787,484	64,707	8.21
81	155	150,000	30,929	127,664	197,584	38,991	19.73
82	71	100,000	30,000	120,400	200,000	49,600	24.80
83	43	40,000	13,920	100,390	158,400	44,090	27.83
84	43	30,000	15,000	60,700	100,000	24,300	24.30
85	76	40,000	18,000	70,500	90,000	1,500	1.67
86	142	250,000	40,000	202,300	300,000	57,700	19.23
87	232	200,000	59,076	180,232	360,381	121,073	33.59
88	51	10,000	19,200	34,378	76,080	22,502	29.57
89	74	70,000	24,646	134,871	179,050	19,533	10.90
90	56	50,000	20,620	101,350	158,400	36,430	23.00
91	53	30,000	16,800	63,118	125,000	45,082	36.06
92	22	18,000	8,400	16,550	36,000	11,050	30.69
93	40	10,000	12,000	20,000	50,000	18,000	36.00
94	259	400,000	85,880	314,548	640,000	239,572	37.43
95	62	50,000	21,722	105,250	173,800	46,828	26.94

* Employees constantly changing. They therefore work but a comparatively short time each.

WOOLLEN GOODS — Continued.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	ESTABLISHMENTS.
\$46,531	\$69,430	53.62	12.80	13.47	20.11	\$2,213	\$445 00	\$283	41
110,000	31,500	69.44	12.50	13.75	4.31	2,162	93 00	270	42
16,500	13,600	63.27	16.67	11.00	9.06	2,054	186 00	342	43
36,000	42,200	61.94	12.00	12.00	14.06	2,884	405 00	346	44
38,671	—19,618	68.00	22.79	18.70	—9.49	1,333	—126 00	304	45
497,189	212,648	55.17	23.15	14.57	7.11	1,355	96 00	313	46
29,478	—21,874	66.99	29.30	14.39	—10.68	1,638	—174 00	480	47
47,500	13,068	74.71	10.70	11.44	3.15	2,660	83 00	284	48
36,000	—5,170	79.72	10.00	12.00	—1.72	2,608	—44 00	260	49
33,500	28,350	67.33	10.18	12.18	10.31	2,864	295 00	291	50
33,500	33,900	64.58	10.91	12.18	12.33	3,021	372 00	327	51
13,800	10,408	63.16	16.67	11.50	8.67	1,500	130 00	250	52
16,916	—6,679	80.58	11.68	12.79	—5.05	2,939	—148 00	343	53
45,975	31,212	59.08	16.00	14.84	10.08	2,438	245 00	390	54
6,029	—227	53.78	27.07	19.90	—7.75	1,121	—8 40	303	55
25,822	2,391	74.82	12.06	12.01	1.11	2,471	27 00	298	56
25,922	—17,741	69.61	25.58	15.24	—10.43	717	—74 00	183	57
30,623	10,658	52.65	25.39	16.29	5.67	1,080	61 00	274	58
48,188	3,451	49.23	29.42	19.92	1.43	1,051	15 00	309	59
30,000	—15,500	65.48	27.62	14.28	—7.38	1,615	—119 00	446	60
15,500	9,750	65.40	14.40	12.40	7.80	2,450	191 00	352	61
26,404	1,082	73.24	14.22	12.05	.49	2,639	13 00	375	62
31,800	33,211	62.02	12.79	12.32	12.87	3,440	442 00	440	63
12,709	3,665	68.51	14.62	13.09	3.78	2,774	104 00	405	64
60,000	—26,000	80.48	11.43	14.28	—6.19	3,333	—206 00	384	65
13,800	18,600	50.59	17.65	13.52	18.24	1,821	332 00	321	66
2,400	150	50.00	35.84	13.33	.83	600	5 00	215	67
7,600	6,100	63.29	17.14	10.85	8.72	1,500	127 00	250	68
14,220	36,697	50.44	11.85	10.53	27.18	3,375	917 00	400	69
20,150	40,534	57.26	11.22	10.46	21.06	3,155	664 00	354	70
15,900	16,604	62.02	12.79	12.32	12.87	2,931	377 00	375	71
20,500	19,500	65.72	11.43	11.71	11.14	3,181	354 00	363	72
10,351	16,157	56.60	10.06	13.02	20.32	1,622	329 00	163	73
11,550	—25,750	66.38	46.95	10.84	—24.17	852	—206 00	400	74
6,620	12,380	48.51	19.93	11.00	20.56	50	10 00	10	75
13,500	—3,375	62.50	24.00	18.00	—4.50	694	—31 00	166	76
34,700	25,800	63.45	14.55	12.62	9.38	2,500	234 00	363	77
21,700	—3,250	60.89	28.57	12.40	—1.86	1,367	—25 00	390	78
19,920	13,580	62.12	17.58	12.07	8.23	1,571	129 00	276	79
105,748	—41,041	70.97	20.82	13.42	—5.21	1,121	—58 00	233	80
28,758	10,233	64.61	15.66	14.55	5.18	1,274	66 00	199	81
26,000	23,600	60.20	15.00	13.00	11.80	2,816	332 00	422	82
18,240	25,850	63.38	8.79	11.51	16.32	3,684	601 00	323	83
11,800	12,500	60.70	15.00	11.80	12.50	2,325	290 00	348	84
11,400	—9,900	78.33	20.00	12.67	—11.00	1,184	—117 00	236	85
45,000	12,700	67.44	13.33	15.00	4.23	2,112	89 00	281	86
48,038	73,035	50.01	16.40	13.32	20.27	1,553	314 00	254	87
8,208	14,294	45.19	25.24	10.78	18.76	1,491	280 00	376	88
22,105	—2,572	75.33	13.77	12.34	—1.44	2,419	—34 00	333	89
18,840	17,590	63.98	13.02	11.89	11.11	2,828	314 00	368	90
14,300	30,782	50.50	13.44	11.44	24.62	2,358	580 00	316	91
4,680	6,370	45.97	23.34	13.00	17.69	1,636	289 00	381	92
5,600	12,400	40.00	24.00	11.20	24.80	1,250	310 00	300	93
88,000	151,572	49.15	13.42	13.75	23.68	2,471	585 00	331	94
20,380	26,448	60.56	12.50	11.72	15.22	2,803	426 00	350	95

STATISTICS OF LABOR.

WOOLLEN GOODS — Concluded.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit	Percentage of gross profit of value of product.
96	133	\$75,000	\$40,000	\$171,200	\$260,000	\$48,800	18.76
97	64	160,000	25,077	62,477	162,825	75,271	46.22
98	58	32,000	19,200	45,660	90,000	25,140	27.93
99	176	150,000	80,000	481,500	575,000	13,500	2.34
100	52	50,000	15,600	101,350	158,400	41,450	26.16
101	89	75,000	25,000	73,600	180,000	81,400	45.22
102	16	16,000	5,500	37,800	45,000	1,700	3.78
103	45	50,000	14,596	56,075	97,500	26,829	27.51
104	47	50,000	16,000	64,507	104,726	24,219	23.12
105	190	125,000	65,000	302,137	430,273	63,136	14.67
106	55	15,000	24,000	46,500	120,000	49,500	41.25
107	37	40,000	15,000	26,050	70,000	28,950	41.36
108	32	25,000	10,000	36,240	60,000	13,760	22.93
109	17	40,000	7,700	31,600	100,000	60,700	60.70
110	25	20,000	8,288	31,976	78,047	37,783	48.41
111	154	200,000	46,951	239,203	295,857	9,703	3.28
112	59	90,000	18,881	107,948	138,112	11,283	8.16
113	79	60,000	22,300	59,142	113,000	31,558	27.92
114	88	75,000	55,801	83,057	124,970	—13,888	—11.11
115	147	100,000	103,067	147,697	300,000	49,236	16.41
116	125	55,000	41,900	152,950	274,000	79,150	28.89
117	112	100,000	39,464	198,876	264,150	25,810	9.77
118	83	100,000	27,600	133,853	209,400	47,947	22.89
119	113	125,000	40,000	111,400	500,000	348,600	69.72
120	73	75,000	9,600	42,250	60,000	8,150	13.58
121	112	75,000	38,000	77,375	139,500	24,125	17.29
122*	147	125,000	7,346	27,173	52,000	17,481	33.61
123	56	100,000	18,563	85,097	125,000	21,340	17.07
124	76	110,000	24,425	83,726	168,500	60,349	35.81
125	109	125,000	33,249	50,000	100,000	16,751	16.76
126	30	10,000	12,000	46,450	96,000	37,550	39.11
127	63	8,000	10,000	38,060	64,800	16,740	25.83
128	65	80,000	24,000	81,850	168,000	62,150	36.99
129	119	60,000	33,573	101,318	175,000	40,109	22.91
130	133	175,000	35,006	177,579	245,996	33,411	13.58
131	35	15,000	15,000	33,500	62,000	13,500	21.77
132	30	60,000	5,160	13,822	62,400	43,418	69.58
133	25	15,000	8,400	45,055	60,000	6,545	10.91
134	134	52,500	54,000	101,871	204,000	48,129	23.59
135	80	120,000	31,086	130,281	211,828	50,461	23.82
136	263	40,000	87,061	358,950	466,275	20,264	4.35
137	56	40,000	20,400	106,990	142,320	14,930	10.49
138	90	100,000	36,000	146,000	250,000	68,000	27.20
139	64	75,000	15,000	97,200	110,000	—2,200	—2.00
140	44	100,000	18,000	90,985	128,000	19,015	14.85
141	498	1,050,000	206,275	415,050	800,000	178,675	22.33
142	100	150,000	30,632	231,400	273,458	11,426	4.18
143	68	100,000	24,000	190,200	300,000	85,800	28.60
144	35	60,000	13,647	108,708	130,000	7,645	5.88
145	40	40,000	12,820	95,463	133,000	24,717	18.58
146	48	100,000	18,000	105,000	175,000	52,000	29.71
147	43	100,000	13,999	184,758	225,000	26,243	11.66
148	31	40,000	10,000	98,000	195,000	87,000	44.61
149	204	385,000	45,500	165,600	275,000	63,900	23.23
150	20	45,000	6,600	41,165	60,000	12,235	20.39

* This establishment ran two months only.

WOOLLEN GOODS — Concluded.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employé.	Average yearly net profit per employé.	Average yearly earnings of each employé.	ESTABLISHMENTS.
\$30,500	\$18,300	65.85	15.39	11.73	7.03	\$1,954	\$137 00	\$300	96
25,883	49,388	38.37	15.41	15.89	30.30	2,544	771 00	391	97
10,920	14,220	50.74	21.33	12.13	15.80	1,551	245 00	331	98
66,500	-53,000	83.74	13.92	11.56	-9.22	3,267	-301 00	454	99
18,840	22,610	63.99	9.85	11.89	14.27	3,046	434 00	300	100
22,500	58,900	40.89	13.89	12.50	32.72	2,022	661 00	280	101
5,460	-3,760	84.00	12.22	12.13	-8.35	2,812	-235 00	343	102
12,750	14,079	57.52	14.97	13.07	14.44	2,166	312 00	324	103
13,473	10,746	61.60	15.28	12.86	10.26	2,228	228 00	340	104
50,527	12,609	70.22	15.11	11.74	2.93	2,264	66 00	342	105
12,900	36,600	38.75	20.00	10.75	30.50	2,181	665 00	436	106
9,400	19,550	37.21	21.43	13.43	27.93	1,891	528 00	405	107
7,500	6,260	60.40	16.67	12.50	10.43	1,875	195 00	312	108
12,400	48,300	31.60	7.70	12.40	48.30	5,882	2,841 00	452	109
9,005	28,778	40.97	10.62	11.53	36.88	3,121	1,151 00	331	110
41,586	-31,883	80.85	15.87	14.05	-10.77	1,921	-207 00	304	111
19,211	-7,928	78.16	13.68	13.90	-5.74	2,340	-134 00	320	112
14,900	16,658	52.34	19.74	13.18	14.74	1,430	210 00	282	113
16,997	-30,885	66.46	44.65	13.60	-24.71	1,420	-350 00	634	114
36,000	13,236	49.23	34.36	12.00	4.41	2,040	90 00	701	115
30,700	48,450	55.82	15.29	11.21	17.68	2,192	387 00	335	116
32,415	-6,605	75.29	14.94	12.27	-2.50	2,358	-58 00	352	117
26,940	21,007	63.93	13.18	12.86	10.03	2,522	253 00	332	118
57,500	291,100	22.28	8.00	11.50	58.22	4,424	2,576 00	353	119
10,500	-2,350	70.42	16.00	17.50	-3.92	821	-32 00	131	120
18,450	5,675	55.47	27.24	13.22	4.07	1,245	50 00	339	121
12,700	4,781	52.26	14.13	24.42	9.19	353	32 00	49	122
18,500	2,840	68.08	14.85	14.80	2.27	2,232	50 00	331	123
23,450	36,899	49.69	14.50	13.91	21.90	2,217	485 00	321	124
17,500	-749	50.00	33.24	17.50	-7.4	917	-6 87	305	125
10,200	27,350	48.39	12.50	10.62	28.49	3,200	911 00	400	126
6,960	9,780	58.74	15.43	10.74	15.09	1,028	155 00	158	127
21,600	40,550	48.72	14.29	12.85	24.14	2,584	623 00	369	128
21,100	19,009	57.90	19.19	12.05	10.86	1,470	159 00	282	129
35,100	-1,689	72.19	14.23	14.26	-6.8	1,849	-12 00	263	130
7,100	6,400	54.03	24.20	11.45	10.32	1,771	182 00	428	131
9,840	33,578	22.15	8.27	15.76	53.82	2,080	1,119 00	172	132
6,900	-355	75.09	14.00	11.50	-5.9	2,400	-14 00	336	133
23,550	24,579	49.94	26.47	11.54	12.05	1,522	183 00	402	134
28,383	22,078	61.50	14.68	13.40	10.42	2,647	275 00	388	135
49,028	-28,764	76.98	18.67	10.51	-6.16	1,772	-109 00	331	136
16,632	-1,702	75.18	14.33	11.68	-1.19	2,541	-30 00	364	137
31,000	37,000	58.40	14.40	12.40	14.80	2,777	411 00	400	138
15,500	-17,700	88.36	13.64	14.09	-16.09	1,718	-276 00	234	139
18,800	215	71.09	14.06	14.68	-1.17	2,909	4 88	409	140
143,000	35,675	51.88	25.79	17.87	4.46	1,606	71 00	416	141
36,346	-24,920	84.62	11.20	13.29	-9.11	2,734	-249 00	306	142
36,000	49,800	63.40	8.00	12.00	16.60	4,411	732 00	352	143
16,600	-8,955	83.62	10.50	12.76	-6.88	3,714	-255 00	361	144
15,700	9,017	71.78	9.64	11.80	6.78	3,325	225 00	320	145
23,500	28,500	60.00	10.29	13.42	16.29	3,645	593 00	375	146
28,500	-2,257	82.12	6.22	12.66	-1.00	5,232	-52 00	325	147
21,900	65,100	50.26	5.13	11.23	33.38	6,290	2,100 00	323	148
50,600	13,300	60.22	16.55	18.40	4.83	1,348	65 00	223	149
8,700	3,535	68.61	11.00	14.50	5.89	3,000	176 00	330	150

WORSTED GOODS.

ESTABLISHMENTS.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.	Percentage of gross profit of value of product.
1	69	\$45,000	\$17,194	\$92,653	\$122,810	\$12,963	10.55
2	296	257,362	72,777	220,385	369,670	76,508	20.69
3	100	60,000	25,000	151,020	170,000	-6,020	-3.54
4	94	40,000	19,200	177,920	196,560	-560	-.28
5	54	60,000	12,000	70,000	80,000	-2,000	-2.50
6	95	200,000	30,000	441,000	520,000	46,000	8.84
7	210	350,000	61,500	431,700	700,000	206,800	29.54
8	63	35,000	20,000	102,000	172,000	50,000	29.06
9	169	150,000	53,000	295,900	422,205	73,305	17.36
10	43	75,000	20,000	160,000	240,000	60,000	25.00
11	930	430,000	293,014	742,019	1,176,350	141,317	12.01
12	23	22,800	8,751	45,240	63,000	9,009	14.30
13	32	30,000	15,000	54,900	127,000	57,100	44.96
14	95	40,000	31,292	151,900	225,000	41,808	18.58
15	209	175,000	44,000	302,000	395,000	49,000	12.40

As a logical supplement to the presentation of the profits and earnings in the 2,440 selected establishments, we give, hereinafter, two similar showings, one for all the cities and towns in the State, and the other for all the manufacturing and mechanical industries. In the city and town showing, 14,134 establishments are represented, with 335,078 employes, and an annual product amounting to \$581,983,449. In the industry showing, 14,560 establishments are comprehended, with 352,516 employes, and an annual product worth \$617,055,281.

The variations in the town and industry showings, as regards the number of establishments and value of product, are explained under the headings "Manufactures by Towns" and "Manufactures by Name" in the census of Massachusetts for 1880, — the supplement to the thirteenth report of this Bureau.

In several industries it frequently happens that an added value is given an article by the use of little if any additional stock or by the labor of comparatively few men. Usually these are cases of what may be termed secondary manufacture; that is, the stock used is not really raw material, but has been advanced to a certain point by the appli-

WORSTED GOODS.

Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employé.	Average yearly net profit per employé.	Average yearly earnings of each employé.	ESTABLISHMENTS.
\$14,981	—\$2,018	75.45	14.00	12.19	—1.64	\$1,779	—\$29.00	\$249	1
52,409	24,099	59.62	19.69	14.17	6.52	1,248	81.00	245	2
20,600	—26,620	88.84	14.70	12.11	—15.65	1,700	—266.00	250	3
22,056	—22,616	90.51	9.77	11.22	—11.50	2,091	—240.00	204	4
11,600	—13,600	87.50	15.00	14.50	—17.00	1,481	—251.00	222	5
64,000	—18,000	85.39	5.77	12.30	—3.46	5,473	—189.00	315	6
91,000	115,800	61.67	8.79	13.00	16.54	3,333	551.00	292	7
19,300	30,700	59.31	11.63	11.22	17.84	2,730	487.00	317	8
51,221	22,084	70.09	12.55	12.13	5.23	2,492	130.00	313	9
28,500	31,500	66.67	8.33	11.87	13.13	5,581	732.00	465	10
143,435	—2,118	63.08	24.91	12.19	—.18	1,264	—227.00	315	11
7,668	1,341	71.81	13.89	12.17	2.13	2,739	58.00	380	12
14,500	42,600	43.23	11.81	11.42	33.54	3,968	1,331.00	468	13
24,900	16,908	67.51	13.91	11.06	7.52	2,368	177.00	329	14
50,000	—1,000	76.46	11.14	12.65	—.25	1,889	—4.78	210	15

cation of labor in another industry, as for instance, wood mouldings, which are made from sawed lumber. Sometimes, however, the raw material itself is of unusual cost, as in the manufacture of dressed furs, the skins used being very valuable. If, in the latter industry, the value of the undressed material used per year is \$20,000, and the labor of four workmen during that time results in a finished product worth \$24,000, it is obvious that the average product per employé, taking value of product alone into consideration, would be \$6,000; but, as a large part of the value of the product is really due to the original value of stock, this average is misleading without explanation. An average more nearly correct in such cases would be the average amount produced by each employé over the original value of the stock. In the instance cited the real amount produced by the four workmen is \$4,000, or an average per employé of \$1,000. But as the element of profit brought out in the presentation had to be based on the actual cost or value of the stock to the employer, it was manifestly impossible to make such a discrimination in the tables, and we need only say that as relates to *product per employé* in the towns of Dennis, Dartmouth, Heath, Northfield, Whately, Wilbra-

ham, Prescott, Lexington, Somerville, Norwood, and Lunenburg, the explanation we have given will account for what might otherwise seem an excessive amount. The enlarged figures chiefly occur in certain industries classed under lumber, food preparations, and fur goods, in which the original value of stock was unusually large. The explanation here given will also explain the seemingly large product per employé shown in "food preparations" in the table presenting profits and earnings by industries.

In a few towns, all comparatively unimportant as regards manufacturing industry, certain of the figures relating to profit and expenses and also percentages and averages are omitted. Discrepancies in the returns for certain industries in these towns naturally vitiate the towns' aggregate showings. An asterisk is affixed to the names of the towns in which such omissions occur, viz.: Dennis and Orleans in Barnstable County; Dartmouth in Bristol County; Peabody and Wenham in Essex County; Leyden, Rowe, and Shutesbury in Franklin County; Prescott in Hampshire County; and New Braintree in Worcester County.

It should be borne in mind in the consideration of all the tables in this Part, relating to profits and earnings, that, generally speaking, the amount given as capital is too small. The entire amount of capital invested in manufacturing industries cannot be accurately ascertained. These industries are largely carried on by the aid of credit and borrowed money. The sums so secured are really "invested," but census returns do not take cognizance of this form of investment. For these reasons the capital invested, and the consequent interest account are undoubtedly both understated. The estimated interest and expense account would manifestly become larger by any increase in the item of interest. The item of expense, however, is based on value of product, which is a positive and known element.

The amount of Government tax is undoubtedly included in the value of product of "Liquors, malt and distilled," given in the table showing profits and earnings by industries. If this tax were deducted from value of product, or, more properly, added to the expense account, the product and

profit per employé, which now seem excessive, would be considerably reduced. We are not in possession of the necessary data for making this adjustment in the figures.

A careful and complete examination of the tables in this Part and in Part II., preceding, has led to many corrections in the elements of persons employed, capital, wages, stock used, and product. These corrections are of importance only as regards the particular establishment in which they were made and do not affect perceptibly any general tables or statements. The establishments in which these corrections have been made can be easily ascertained, for in such the number of employés given in Part III. will vary from the number given in Part II. The figures given in Part III. are the correct ones, and those in Part II. should be changed to correspond. We may state generally that in all cases where the relations of capital, wages, stock used, and product seemed unusual, the gross profit excessive, or the yearly product, profit or earnings per employé either very large or very small, a reference has been made to the original returns of the manufacturer, and the figures given are sustained by such examination.* We desire to call particular attention to the significance of the minus signs used in the table, the exact meaning of which is given on pages 248 and 249. The tables show in a marked manner the great diversity between individual establishments; a diversity necessarily lost sight of in general averages such as are usually given. The best scientific study of the wages question can be made from the figures of a large number of establishments, each preserving its identity, and not from an aggregation of details so widely divergent as those shown in the preceding tables in Parts II. and III.

* The revision of the print disclosed a few variations, not of great importance, but for the correction of which we supply data as follows:

Page 353. Rockland. Earnings. \$430 *instead of* \$439.

Page 357. Food preparations. Profit. —\$195 *instead of* —\$194.

Page 359. Scientific instruments. Profit. \$196 *instead of* \$199.

Page 361. Worsted goods. Profit. \$82 *instead of* \$84.

Page 367. Lawrence, Cotton Goods. Product. \$1066 *instead of* \$1068; Taunton, Machines and Machinery. Earnings. \$578 *instead of* \$579.

PROFITS AND EARNINGS—BY CITIES AND TOWNS.

	COUNTIES, CITIES AND TOWNS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
COUNTY OF BARN-							
STABLE.							
1	Barnstable, . . .	47	\$20,950	\$8,001	\$41,858	\$59,720	\$9,861
2	Chatham, . . .	9	6,400	2,450	16,545	20,925	1,930
3	Dennis,* . . .	6	10,200	2,350	-	31,700	-
4	Falmouth, . . .	181	1,043,830	58,958	435,202	713,875	219,715
5	Harwich, . . .	16	9,000	3,850	8,400	15,200	2,950
6	Orleans,* . . .	407	21,400	11,760	72,035	94,917	11,122
7	Provincetown, . .	37	22,900	19,530	18,400	57,800	19,870
8	Sandwich, . . .	247	161,125	72,173	199,331	328,470	56,966
9	Yarmouth, . . .	29	6,650	4,160	4,713	15,630	6,757
COUNTY OF BERK-							
SHIRE.							
1	Adams, . . .	1,646	1,349,600	496,721	1,130,196	2,127,669	500,752
2	Alford, . . .	4	6,100	1,135	8,439	11,480	1,906
3	Becket, . . .	28	41,783	9,469	93,456	113,042	10,117
4	Cheshire, . . .	437	674,450	180,790	178,335	400,060	40,935
5	Dalton, . . .	552	953,900	203,025	723,832	1,225,277	298,420
6	Egremont, . . .	70	26,750	26,991	58,940	111,740	25,809
7	Great Barrington, .	648	671,650	197,919	589,143	986,014	198,952
8	Hancock, . . .	21	17,850	5,753	36,388	54,762	12,621
9	Hinsdale, . . .	348	376,500	72,711	266,249	449,217	110,257
10	Lee, . . .	582	919,800	230,199	962,775	1,425,827	232,853
11	Lenox, . . .	52	53,900	12,400	54,225	86,350	19,725
12	Monterey, . . .	4	5,500	725	3,250	5,750	1,775
13	New Marlborough, .	99	97,900	31,239	113,585	198,377	53,553
14	North Adams, . .	2,166	2,275,509	690,156	2,361,479	4,042,314	990,679
15	Otis, . . .	23	30,700	4,925	23,400	37,785	9,460
16	Peru, . . .	2	5,100	285	1,075	2,455	1,095
17	Pittsfield, . . .	2,247	2,465,015	725,826	2,644,584	4,343,655	973,245
18	Sandisfield, . . .	26	22,900	3,800	15,830	39,550	19,920
19	Savoy, . . .	19	6,000	4,100	5,850	11,600	1,650
20	Sheffield, . . .	25	47,100	4,447	46,026	62,471	11,998
21	Stockbridge, . .	233	188,100	78,394	385,735	438,940	-25,189
22	Tyringham, . . .	9	10,800	2,475	3,400	10,400	4,525
23	West Stockbridge, .	103	136,400	35,315	145,429	258,374	77,630
24	Williamstown, . .	372	509,162	67,526	208,397	362,448	86,525
25	Windsor, . . .	11	22,900	1,780	4,400	10,550	4,370
COUNTY OF BRISTOL							
1	Acushnet, . . .	27	40,150	6,450	18,565	39,280	14,265
2	Attleborough, . .	3,398	2,862,390	1,415,666	1,993,069	4,346,309	937,574
3	Berkley, . . .	13	7,500	3,850	4,550	13,800	5,400
4	Dartmouth,* . . .	13	32,076	1,575	-	47,865	-
5	Dighton, . . .	149	208,900	48,420	255,165	374,700	71,112
6	Easton, . . .	689	485,900	231,585	537,064	1,287,850	519,201
7	Fairhaven, . . .	222	193,200	76,525	139,350	254,600	38,725
8	Fall River, . . .	16,483	24,252,586	4,312,105	10,014,981	18,978,776	4,651,690
9	Freetown, . . .	62	70,500	14,237	34,513	80,430	31,680
10	Mausfield, . . .	565	290,200	219,527	279,350	718,760	219,823
11	New Bedford, . .	5,507	7,143,507	1,907,773	5,256,269	8,880,384	1,716,342
12	Norton, . . .	236	250,900	78,706	203,548	343,975	61,721
13	Raynham, . . .	139	58,900	49,348	160,845	235,017	24,824
14	Seekonk, . . .	39	16,300	12,150	38,100	69,350	19,100
15	Somersct, . . .	136	330,545	91,700	159,250	399,800	148,850
16	Swansea, . . .	38	24,400	10,472	21,813	39,607	7,412
17	Taunton, . . .	5,163	4,324,134	2,090,690	4,202,917	7,663,656	1,280,049
18	Westport, . . .	183	300,750	56,225	133,300	210,900	16,384

PROFITS AND EARNINGS — BY CITIES AND TOWNS.

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employee.	Average yearly net profit per employee.	Average yearly earnings of each employee.	
16.51	\$7,229	\$2,632	70.09	13.40	12.10	4.41	\$1,270	\$56 00	\$170	1
9.22	2,477	—547	79.07	11.71	11.83	—2.61	2,325	—60 00	272	2
-	3,782	-	-	7.41	11.93	-	5,283	-	391	3
30.78	134,017	85,698	60.96	8.26	18.78	12.00	3,944	473 00	325	4
19.41	2,060	890	55.27	25.32	13.56	5.85	950	55 00	240	5
11.72	10,776	346	75.89	12.39	11.35	.37	233	85	-	6
34.38	7,154	12,716	31.83	33.79	12.38	22.00	1,562	343 00	527	7
17.34	42,515	14,451	60.60	21.97	12.94	4.40	1,329	58 00	292	8
43.23	1,962	4,795	30.15	26.62	12.55	30.68	538	105 00	143	9
23.53	293,743	207,009	53.12	23.35	13.80	9.73	1,292	125 00	301	1
16.60	1,514	392	73.51	9.89	13.19	3.41	2,870	98 00	283	2
8.95	13,811	—3,694	82.67	8.38	12.21	—3.26	4,037	—131 00	338	3
10.23	80,473	—59,538	44.58	45.19	20.11	—9.88	915	—90 00	413	4
24.35	179,762	118,658	59.08	16.57	14.67	9.68	2,219	214 00	367	5
23.09	12,779	13,030	52.76	24.15	11.43	11.66	1,596	186 00	355	6
20.17	138,900	60,052	59.75	20.08	14.08	6.09	1,521	92 00	305	7
23.04	6,547	6,674	66.45	10.51	11.95	11.09	2,607	289 00	273	8
24.54	67,512	42,745	59.27	16.19	15.03	9.51	1,290	122 00	298	9
16.33	197,771	35,982	67.52	16.15	13.87	2.46	2,449	60 00	395	10
22.84	11,869	7,856	62.80	14.26	13.74	9.10	1,660	151 00	238	11
30.86	905	870	56.53	12.61	15.73	15.13	1,437	217 00	181	12
26.99	25,712	27,841	57.26	15.75	12.96	14.03	2,003	281 00	315	13
24.50	540,762	449,917	58.42	17.08	13.37	11.13	1,866	207 00	318	14
25.03	5,621	3,899	61.93	13.04	14.87	10.16	1,642	166 00	214	15
44.60	552	543	43.79	11.61	22.48	22.12	1,227	271 00	143	16
22.40	582,266	390,979	60.89	16.71	13.40	9.00	1,933	174 00	323	17
50.36	5,329	14,591	40.03	9.61	13.47	36.89	1,521	561 00	146	18
14.22	1,520	130	50.43	35.35	13.10	1.12	610	6 84	215	19
19.20	9,073	2,925	73.68	7.12	14.52	4.68	2,498	117 00	177	20
—5.74	55,180	—80,369	87.88	17.86	12.57	—18.31	1,883	—344 00	336	21
43.50	1,688	2,837	32.70	23.80	16.23	27.27	1,155	315 00	275	22
30.04	34,021	43,609	56.29	13.67	13.16	16.88	2,508	423 00	342	23
23.87	66,795	19,730	57.50	18.63	13.43	5.44	974	53 00	181	24
41.42	2,429	1,941	41.71	16.87	23.02	18.04	959	176 00	161	25
36.31	6,337	7,928	16.42	47.27	16.13	20.18	1,454	293 00	238	1
21.57	606,374	331,200	45.86	32.57	13.95	7.62	1,279	97 00	416	2
39.13	1,830	3,570	32.97	27.90	13.26	25.87	1,061	274 00	296	3
-	6,711	-	-	3.29	14.02	59.73	3,681	-	121	4
18.97	49,998	21,114	68.10	12.93	13.84	5.63	2,514	141 00	324	5
40.31	29,154	490,047	41.71	17.98	2.26	38.05	1,869	711 00	336	6
15.21	37,052	1,673	54.73	30.06	14.55	.66	1,146	7 53	344	7
24.50	3,353,033	1,298,657	52.77	22.73	17.66	6.84	1,151	78 00	261	8
39.38	12,273	19,407	42.01	17.71	15.26	24.12	1,297	313 00	229	9
30.55	89,282	130,541	38.87	30.55	12.42	18.16	1,272	231 00	388	10
19.32	1,316,649	399,693	59.19	21.49	14.82	4.50	1,612	72 00	346	11
17.94	49,452	12,269	59.18	22.88	14.37	3.57	1,457	51 00	323	12
10.56	27,036	—2,212	68.44	21.00	11.50	—94	1,690	—15 00	355	13
27.54	7,913	11,187	54.94	17.52	11.41	16.13	1,778	286 00	311	14
37.23	59,813	89,037	39.83	22.94	14.96	22.27	2,959	654 00	674	15
18.67	5,434	1,978	54.95	26.38	13.69	4.98	1,044	52 00	275	16
16.70	1,025,814	254,235	56.02	27.28	13.38	3.32	1,484	49 00	404	17
7.77	39,136	—22,752	65.57	26.66	18.55	—10.78	1,152	—124 00	307	18

PROFITS AND EARNINGS—BY CITIES AND TOWNS—Con.

	COUNTIES, CITIES AND TOWNS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
COUNTY OF ESSEX.							
1	Amesbury, . . .	575	\$360,200	\$255,400	\$681,250	\$1,206,509	\$269,859
2	Andover, . . .	821	795,410	246,267	1,066,713	1,633,502	322,522
3	Beverly, . . .	1,713	638,365	740,431	2,211,895	3,333,056	380,730
4	Boxford, . . .	47	56,600	14,085	22,035	47,725	11,605
5	Bradford, . . .	19	9,300	4,460	46,925	66,287	14,902
6	Danvers, . . .	1,270	654,500	396,702	1,245,826	1,919,848	277,320
7	Essex, . . .	112	43,900	28,700	121,500	196,200	46,000
8	Georgetown, . .	364	150,900	136,461	367,989	575,412	70,962
9	Gloucester, . .	377	361,900	156,744	389,375	723,455	177,336
10	Groveland, . . .	445	539,425	132,950	609,250	898,050	155,850
11	Hamilton, . . .	83	40,700	27,050	96,380	180,931	57,501
12	Haverhill, . . .	8,145	1,919,020	2,839,715	7,347,561	11,755,294	1,568,018
13	Ipswich, . . .	521	283,000	172,366	260,290	534,212	101,556
14	Lawrence, . . .	13,014	14,319,477	4,233,771	10,744,461	19,332,934	4,354,702
15	Lynn, . . .	12,446	5,882,350	5,823,572	15,551,938	25,216,778	3,841,268
16	Lynnfield, . . .	74	12,300	25,900	70,350	120,500	24,250
17	Manchester, . . .	86	87,800	36,300	59,200	121,500	26,000
18	Marblehead, . .	2,633	510,500	745,665	1,370,365	2,410,593	294,563
19	Merrimac, . . .	489	353,050	210,388	363,325	703,550	129,837
20	Methuen, . . .	1,113	1,596,000	324,400	915,455	1,498,146	258,291
21	Middleton, . . .	184	97,400	80,227	189,325	317,996	48,444
22	Newbury, . . .	25	15,800	7,635	21,960	47,530	17,875
23	Newburyport, . .	2,901	1,619,550	779,832	1,859,207	3,223,382	586,343
24	North Andover, .	824	651,700	325,400	856,585	1,383,100	203,115
25	Peabody,* . . .	1,195	1,063,670	543,453	-	4,263,344	-
26	Rockport, . . .	346	233,000	61,558	211,616	393,221	120,047
27	Rowley, . . .	216	79,100	71,950	211,435	327,288	43,903
28	Salem, . . .	4,367	4,147,400	1,498,203	5,780,379	8,440,350	1,161,768
29	Salisbury, . . .	533	311,400	231,726	673,915	1,057,050	151,409
30	Saugus, . . .	321	162,100	89,932	317,722	479,269	71,615
31	Topsfield, . . .	108	55,900	31,962	140,337	188,105	15,806
32	Wenham,* . . .	19	13,580	-	20,260	30,254	-
33	West Newbury, .	303	109,700	108,740	209,610	371,900	53,550
COUNTY OF FRANK- LIN.							
1	Ashfield, . . .	15	19,620	3,065	21,523	35,600	11,010
2	Bernardston, . .	49	27,200	18,810	73,150	114,550	22,890
3	Buckland, . . .	250	506,897	98,636	96,929	279,534	83,969
4	Charlemont, . .	64	56,250	11,641	42,763	77,208	22,804
5	Colrain, . . .	312	367,876	69,368	158,568	317,853	89,917
6	Conway, . . .	202	255,700	57,199	243,334	423,373	122,840
7	Deerfield, . . .	83	47,350	28,536	112,347	186,303	45,420
8	Erving, . . .	293	260,500	96,750	123,675	327,720	107,295
9	Gill, . . .	32	87,800	12,600	45,225	65,089	7,264
10	Greenfield, . . .	253	268,550	86,099	189,212	345,103	69,792
11	Hawley, . . .	14	9,500	2,045	3,245	7,200	1,910
12	Heath, . . .	2	5,800	400	14,745	18,565	3,420
13	Leverett, . . .	15	25,800	2,310	15,975	28,180	9,895
14	Leyden,* . . .	7	6,300	-	5,405	6,780	-
15	Montague, . . .	1,302	2,213,076	394,298	855,913	1,616,884	366,673
16	New Salem, . .	20	21,500	5,000	36,722	61,131	19,409
17	Northfield, . . .	4	12,600	1,012	12,975	20,953	6,966
18	Orange, . . .	676	708,500	341,312	701,768	1,487,003	443,923
19	Rowe,* . . .	8	6,700	-	7,935	12,865	-
20	Shelburne, . . .	180	105,900	59,644	82,201	200,662	58,817
21	Shutesbury,* . .	14	3,800	-	11,958	19,910	-
22	Warwick, . . .	44	21,100	9,000	26,940	47,850	11,910
23	Wendell, . . .	50	52,300	9,825	30,935	48,130	7,370
24	Whately, . . .	9	17,300	1,708	38,797	47,567	7,062

PROFITS AND EARNINGS—BY CITIES AND TOWNS—Con.

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	
22.36	\$142,263	\$127,596	56.47	21.17	11.79	10.57	\$2,098	\$221 00	\$444	1
19.72	211,275	111,247	65.22	15.06	12.92	6.80	1,992	135 00	299	2
11.42	371,608	9,122	66.36	22.22	11.15	.27	1,945	5 32	432	3
24.31	8,169	3,436	46.17	29.52	17.11	7.20	1,015	73 00	299	4
22.48	7,187	7,715	70.79	6.73	10.84	11.64	3,488	406 00	234	5
14.44	231,255	46,065	64.89	20.67	12.04	2.40	1,511	36 00	312	6
23.44	22,254	23,746	61.93	14.63	11.34	12.10	1,751	212 00	256	7
12.33	66,595	4,967	63.95	23.72	11.57	.76	1,580	11 00	374	8
24.51	94,060	83,276	53.82	21.67	13.00	11.51	1,918	220 00	415	9
17.35	122,171	33,679	67.84	14.81	13.60	3.75	2,018	75 00	298	10
31.78	20,535	36,966	53.27	14.95	11.35	20.43	2,179	445 00	325	11
13.33	1,290,671	277,347	62.51	24.16	10.98	2.35	1,443	34 00	348	12
19.01	70,401	31,155	48.72	32.27	13.18	5.83	1,025	59 00	330	13
22.52	2,792,462	1,562,240	55.53	21.90	14.44	8.08	1,485	120 00	325	14
15.23	2,874,619	966,649	61.67	23.10	11.40	3.83	2,026	77 00	468	15
20.12	12,788	11,462	58.38	21.50	10.61	9.51	1,628	154 00	350	16
21.40	17,418	8,582	48.72	29.88	14.34	7.06	1,412	99 00	422	17
12.21	271,689	22,874	56.85	30.94	11.27	.94	915	8 68	283	18
18.45	91,538	38,299	51.64	29.91	13.01	5.41	1,438	78 00	430	19
17.24	245,575	12,716	61.11	21.65	16.39	.85	1,346	11 00	291	20
15.23	37,644	10,800	59.54	25.23	11.84	3.39	1,728	58 00	436	21
37.60	5,701	12,174	46.21	16.19	11.99	25.61	1,901	486 00	307	22
18.17	419,711	166,632	57.65	24.18	13.01	5.16	1,111	57 00	268	23
14.66	175,452	27,663	61.84	23.50	12.66	2.00	1,680	33 00	394	24
-	490,655	944,982	-	12.73	11.49	-	3,571	-	454	25
30.52	53,302	66,745	53.82	15.66	13.55	16.97	1,136	192 00	177	26
13.41	37,475	6,428	64.61	21.98	11.45	1.96	1,515	29 00	333	27
13.76	1,092,879	68,889	68.49	17.75	12.95	.81	1,932	15 00	343	28
14.32	124,389	27,020	63.76	21.92	11.77	2.55	1,983	50 00	434	29
14.94	57,653	13,962	66.29	18.77	12.03	2.91	1,306	43 00	280	30
8.40	22,165	-6,359	74.61	16.99	11.78	-3.38	1,741	-58 00	295	31
-	3,840	-	66.97	-	12.69	-	1,592	-	-	32
14.39	43,772	9,778	56.37	29.24	11.77	2.62	1,227	32 00	358	33
30.92	4,737	6,273	60.47	8.61	13.30	17.62	2,373	418 00	204	1
19.93	13,117	9,773	63.69	16.38	11.42	8.51	2,343	199 00	383	2
30.03	58,367	25,602	34.68	35.29	20.88	9.15	1,118	102 00	394	3
29.54	11,096	11,708	55.38	15.08	14.37	15.17	1,206	182 00	181	4
28.28	53,858	36,059	49.89	21.83	11.34	16.94	1,018	115 00	222	5
29.01	57,679	65,161	57.48	13.51	13.62	15.39	2,095	322 00	283	6
24.37	21,471	23,949	60.31	15.32	11.52	12.85	2,244	288 00	343	7
32.73	48,402	58,893	37.74	29.53	14.76	17.97	1,118	201 00	330	8
11.16	11,777	-4,513	69.48	19.36	18.06	-6.93	2,034	-141 00	393	9
20.22	50,623	19,169	54.83	24.95	14.67	5.55	1,364	75 00	340	10
26.52	1,290	620	45.07	28.41	17.91	8.61	514	44 00	146	11
18.42	2,205	1,215	79.42	2.16	11.88	6.54	9,282	607 00	200	12
35.11	4,366	5,529	56.69	8.20	15.49	19.62	1,778	368 00	154	13
-	1,056	-	79.72	-	15.57	-	908	-	-	14
22.67	294,473	72,200	52.94	24.39	18.21	4.46	1,241	55 00	302	15
31.75	7,403	12,006	60.07	8.18	12.11	19.64	3,056	600 00	250	16
33.24	2,851	4,115	61.93	4.83	13.60	19.64	5,238	1,028 00	253	17
29.85	191,210	252,713	47.20	22.95	12.86	16.99	2,199	373 00	504	18
-	1,689	-	61.68	-	20.80	-	1,608	-	-	19
29.31	26,420	32,397	40.97	29.72	13.17	16.14	1,114	179 00	331	20
-	2,219	-	60.07	-	11.14	-	1,422	-	-	21
24.89	6,051	5,859	56.30	18.81	12.65	12.24	1,087	133 00	204	22
15.31	7,951	-581	64.29	20.40	16.51	-1.20	962	-11 00	196	23
14.84	5,795	1,267	81.57	3.59	12.18	2.66	5,285	140 00	189	24

PROFITS AND EARNINGS — BY CITIES AND TOWNS — Con.

	COUNTIES, CITIES AND TOWNS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
COUNTY OF HAMP-							
DEN.							
1	Agawam, . . .	127	\$176,500	\$34,786	\$90,952	\$180,859	\$55,121
2	Blandford, . . .	11	18,500	2,950	12,565	24,650	9,135
3	Brimfield, . . .	75	50,300	14,660	70,605	116,788	31,523
4	Chester, . . .	86	53,000	28,050	64,175	131,400	39,175
5	Chicopee, . . .	3,411	4,141,650	986,533	2,309,049	4,222,015	926,433
6	Granville, . . .	117	66,700	30,930	42,945	83,125	9,252
7	Hampden, . . .	179	144,050	46,132	249,989	401,745	105,624
8	Holyoke, . . .	8,485	9,022,914	2,621,985	6,968,066	12,361,470	2,771,419
9	Longmeadow, . . .	11	15,450	3,820	17,895	24,550	2,835
10	Monson, . . .	879	782,500	296,712	1,068,128	1,612,551	247,711
11	Palmer, . . .	1,538	1,275,500	407,071	1,136,302	2,039,574	496,201
12	Russell, . . .	258	279,900	85,323	204,197	363,411	73,891
13	Southwick, . . .	35	24,740	7,009	30,283	55,720	18,428
14	Springfield, . . .	7,152	8,761,435	2,842,664	7,685,390	12,595,997	2,067,943
15	Tolland, . . .	41	23,500	12,575	51,480	72,200	8,145
16	Wales, . . .	161	43,500	51,158	229,549	408,650	127,943
17	Westfield, . . .	1,177	1,317,865	483,267	1,085,929	2,191,262	622,066
18	West Springfield, . . .	450	567,050	114,374	298,082	557,033	144,577
19	Wilbraham, . . .	256	436,050	95,912	1,124,975	1,301,124	80,237
COUNTY OF HAMP-							
SIRE.							
1	Amherst, . . .	281	156,100	80,321	250,151	419,679	89,207
2	Belchertown, . . .	66	58,775	17,399	91,239	128,840	20,202
3	Chesterfield, . . .	34	33,725	6,565	17,630	33,070	8,875
4	Cummington, . . .	88	46,358	20,803	32,756	79,547	25,988
5	Easthampton, . . .	1,334	1,388,775	399,472	1,375,020	2,163,689	389,197
6	Enfield, . . .	179	194,000	56,064	225,998	378,300	96,238
7	Granby, . . .	4	8,800	850	15,625	20,600	4,125
8	Greenwich, . . .	19	18,150	6,050	29,535	35,967	6,382
9	Hadley, . . .	72	56,500	19,960	75,266	112,593	17,367
10	Hatfield, . . .	48	26,700	18,100	27,905	49,825	3,820
11	Huntington, . . .	213	382,900	74,581	227,150	350,880	49,149
12	Northampton, . . .	1,605	1,365,200	634,651	1,450,393	2,729,959	638,915
13	Plainfield, . . .	10	5,200	—	6,509	10,407	3,563
14	Prescott,* . . .	10	5,600	3,600	—	34,850	—
15	South Hadley, . . .	785	778,900	213,672	348,200	778,945	217,073
16	Southampton, . . .	11	10,970	1,905	8,980	18,400	7,515
17	Ware, . . .	2,193	1,123,000	504,786	1,246,889	2,152,004	400,329
18	Westhampton, . . .	17	15,200	3,400	7,323	15,627	4,904
19	Williamsburg, . . .	98	117,500	36,850	131,190	228,160	60,120
20	Worthington, . . .	25	24,050	3,742	11,555	31,975	16,678
COUNTY OF MID-							
DLESEX.							
1	Acton, . . .	179	137,960	62,861	234,009	387,587	90,717
2	Arlington, . . .	143	127,350	70,324	125,598	321,485	125,563
3	Ashby, . . .	25	21,350	5,820	27,090	45,200	12,290
4	Ashland, . . .	705	307,400	223,732	958,963	1,335,946	153,251
5	Ayer, . . .	284	279,132	100,494	322,933	684,018	200,591
6	Bedford, . . .	20	37,212	7,491	39,698	52,736	5,547
7	Billerica, . . .	284	577,500	109,794	727,716	1,037,015	199,505
8	Burlington, . . .	41	11,200	6,684	14,890	25,790	4,216
9	Cambridge, . . .	7,886	6,418,099	3,414,214	19,637,881	26,124,023	3,071,928
10	Carlisle, . . .	12	7,750	2,640	1,500	6,950	2,510
11	Chelmsford, . . .	378	246,700	90,604	720,003	901,485	90,878
12	Concord, . . .	717	299,000	108,679	847,197	1,367,060	411,184
13	Dracut, . . .	494	566,600	155,598	673,390	1,103,208	274,220
14	Dunstable, . . .	5	3,200	725	3,865	6,000	1,410
15	Everett, . . .	252	431,850	93,950	481,894	814,350	238,506
16	Framingham, . . .	1,260	1,416,315	454,829	1,020,996	1,686,991	211,166
17	Groton, . . .	102	242,000	37,000	139,242	213,750	37,508

PROFITS AND EARNINGS—BY CITIES AND TOWNS.— Con.

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employé.	Average yearly net profit per employé.	Average yearly earnings of each employé.	
30.47	\$23,676	\$26,445	50.29	19.24	15.85	14.62	\$1,424	\$208 00	\$273	1
37.05	3,575	5,560	50.98	11.97	14.50	22.55	2,240	505 00	258	2
26.99	14,637	16,823	60.46	12.55	12.59	14.40	1,557	324 00	195	3
29.81	16,321	22,855	48.84	21.35	12.42	17.39	1,527	265 00	326	4
21.94	670,701	255,732	54.69	23.37	15.88	6.06	1,237	74 00	289	5
11.13	12,315	13,063	51.66	37.21	14.81	-3.64	710	-26 00	264	6
26.29	48,818	56,806	62.23	11.48	12.15	14.14	2,244	317 00	257	7
22.42	1,777,522	993,897	56.37	21.21	14.38	8.04	1,456	117 00	309	8
11.55	3,382	-547	72.89	15.56	13.77	-2.22	2,231	-49 00	347	9
15.36	208,205	39,506	66.24	18.40	12.91	2.45	1,835	44 00	341	10
24.32	280,487	215,714	55.72	19.96	13.75	10.57	1,326	140 00	264	11
20.33	53,135	20,756	56.19	23.48	14.62	5.71	1,408	80 00	330	12
33.07	7,056	11,372	54.35	12.58	20.41	12.65	1,592	324 00	200	13
16.42	1,785,285	282,658	61.01	22.57	14.17	2.25	1,761	40 00	397	14
11.28	8,630	-185	71.30	17.42	11.95	-6.67	1,760	-11 00	306	15
31.30	43,475	84,468	56.18	12.52	10.63	20.67	2,538	524 00	317	16
28.39	298,198	323,863	49.56	22.05	13.61	14.78	1,892	275 00	411	17
25.94	89,726	54,851	53.52	20.54	16.10	9.84	1,237	121 00	254	18
6.17	156,275	-76,938	86.46	7.37	12.01	-5.84	5,082	-296 00	374	19
21.25	51,334	37,873	59.61	19.14	12.23	9.02	1,493	134 00	235	1
15.68	16,411	3,791	70.82	13.50	12.73	2.95	1,952	57 00	252	2
26.83	5,331	3,544	53.31	19.86	16.12	10.71	972	104 00	193	3
32.66	10,736	15,232	41.18	23.16	13.49	19.17	903	173 00	236	4
17.98	299,695	89,592	63.55	18.47	13.85	4.13	1,621	67 00	299	5
25.43	49,470	46,768	59.75	14.82	13.07	12.36	2,113	261 00	313	6
20.02	2,588	1,537	75.85	4.13	12.56	7.46	5,150	384 00	212	7
17.74	4,686	1,696	65.44	16.82	13.03	4.71	1,893	89 00	318	8
15.42	14,649	2,718	66.85	17.73	13.01	2.41	1,563	37 00	277	9
7.67	6,585	-2,765	56.00	36.33	13.21	-5.54	1,038	-57 00	377	10
14.01	58,062	-8,913	64.74	21.25	16.55	-2.54	1,647	-41 00	350	11
23.45	354,308	284,607	53.25	23.30	13.00	10.45	1,637	177 00	395	12
34.23	1,353	2,210	62.55	-	13.00	21.23	1,040	221 00	-	13
-	3,821	-	-	10.33	10.96	-	3,485	-	360	14
27.86	124,619	92,454	44.71	27.43	15.99	11.87	992	118 00	272	15
40.84	2,498	5,017	48.81	10.35	13.57	27.27	1,672	456 00	173	16
18.60	282,580	117,749	57.94	23.46	13.13	5.47	981	53 00	230	17
31.38	2,475	2,429	46.86	21.76	15.84	15.54	919	142 00	200	18
26.34	29,866	39,254	57.50	16.16	13.08	13.26	2,328	305 00	376	19
52.15	4,641	12,037	36.14	11.71	14.51	37.64	1,279	481 00	149	20
23.40	47,036	43,681	60.38	16.22	12.13	11.27	2,165	244 00	351	1
39.05	39,790	85,773	39.07	21.88	12.37	26.68	2,248	509 00	491	2
27.19	5,891	6,489	59.93	12.88	12.83	14.36	1,898	259 00	232	3
11.47	152,039	1,212	71.78	16.75	11.38	.09	1,894	1 71	317	4
38.09	85,150	175,441	47.21	14.70	12.44	25.65	2,403	617 00	353	5
10.52	7,506	-1,959	75.28	14.20	14.23	-3.71	2,636	-97 00	374	6
19.23	138,352	61,133	70.18	10.59	13.34	5.89	3,651	215 00	386	7
16.34	3,251	965	57.74	25.92	12.60	3.74	629	23 00	163	8
11.75	2,997,488	74,440	75.18	13.07	11.47	.28	3,312	9 43	432	9
36.11	1,160	1,350	25.90	37.99	16.69	19.42	579	112 00	220	10
10.08	104,951	-14,073	79.87	10.05	11.64	-1.56	2,384	-37 00	239	11
30.07	154,646	256,538	61.98	7.95	11.31	18.76	1,906	357 00	151	12
24.85	144,317	129,903	61.04	14.11	13.08	11.77	2,233	262 00	314	13
23.50	792	618	64.42	12.08	13.20	10.30	1,200	123 00	145	14
29.28	107,346	131,161	59.18	11.54	13.18	16.10	3,231	520 00	372	15
12.51	253,678	-42,512	60.53	26.96	15.03	-2.52	1,338	-33 00	360	16
17.54	35,895	1,613	65.15	17.31	16.79	.75	2,095	15 00	362	17

PROFITS AND EARNINGS—BY CITIES AND TOWNS—Con.

	COUNTIES, CITIES AND TOWNS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
	COUNTY OF MID- DLESEX—Con.						
18	Holliston, . . .	800	\$135,010	\$210,672	\$525,821	\$844,070	\$107,577
19	Hopkinton, . . .	1,194	443,000	476,470	1,294,366	2,020,700	249,864
20	Hudson, . . .	1,255	467,400	494,490	1,584,700	2,297,816	218,626
21	Lexington, . . .	49	19,725	15,925	282,225	323,550	25,400
22	Lincoln, . . .	7	6,600	725	12,560	16,780	3,495
23	Littleton, . . .	31	16,750	8,860	31,550	46,750	6,340
24	Lowell, . . .	20,572	19,021,450	5,954,879	15,739,027	28,656,196	6,962,290
25	Malden, . . .	1,437	883,250	533,133	1,791,525	2,836,229	511,551
26	Marlborough, . . .	3,486	983,240	1,451,972	3,571,634	5,565,208	541,602
27	Maynard, . . .	965	1,047,000	308,000	1,209,225	2,226,700	709,475
28	Medford, . . .	856	780,900	236,519	950,895	1,374,350	186,936
29	Melrose, . . .	176	47,500	71,800	120,435	252,610	60,375
30	Natick, . . .	1,994	1,013,550	747,524	2,415,182	3,595,749	433,048
31	Newton, . . .	907	805,300	394,452	1,181,930	1,874,370	297,988
32	North Reading, . . .	52	27,900	15,165	88,006	111,640	8,469
33	Pepperell, . . .	536	308,500	134,356	684,300	930,025	111,375
34	Reading, . . .	454	106,274	117,506	333,590	593,016	141,920
35	Sherborn, . . .	81	28,000	13,574	38,098	63,925	12,253
36	Shirley, . . .	269	250,650	56,579	146,647	284,753	81,527
37	Somerville, . . .	953	1,482,795	414,508	4,442,692	5,447,035	589,835
38	Stoneham, . . .	1,389	590,400	520,432	1,771,254	2,589,650	297,964
39	Stow, . . .	84	110,800	29,254	179,919	245,495	36,322
40	Sudbury, . . .	26	27,500	8,900	59,950	79,355	10,505
41	Tewksbury, . . .	28	51,000	8,064	54,200	86,400	24,136
42	Townsend, . . .	190	236,600	60,995	171,465	267,660	35,200
43	Tyngsborough, . . .	25	19,200	8,615	48,615	68,300	11,070
44	Wakefield, . . .	1,147	1,216,200	318,919	527,576	1,057,880	211,385
45	Waltham, . . .	3,171	2,601,850	1,345,372	1,599,432	3,447,646	502,842
46	Watertown, . . .	752	959,450	359,761	1,049,223	1,842,126	433,142
47	Wayland, . . .	565	124,200	275,452	870,386	1,228,217	82,379
48	Westford, . . .	339	421,335	98,561	490,441	826,255	237,253
49	Weston, . . .	57	35,100	12,760	29,200	69,985	28,025
50	Winchester, . . .	570	567,600	172,133	1,482,571	2,077,840	423,136
51	Woburn, . . .	2,205	1,877,389	854,260	3,863,823	5,556,396	838,313
	COUNTY OF NOR- FOLK.						
1	Bellingham, . . .	180	265,500	66,474	279,620	467,665	121,571
2	Braintree, . . .	342	320,500	122,422	444,068	641,407	74,917
3	Brookline, . . .	305	342,350	188,159	174,500	457,550	94,891
4	Canton, . . .	740	885,500	267,770	1,221,613	1,548,892	59,509
5	Cohasset, . . .	9	12,800	4,078	14,800	21,000	2,122
6	Dedham, . . .	664	1,327,000	271,234	676,168	1,260,627	313,225
7	Foxborough, . . .	1,569	513,550	298,203	708,451	1,068,881	62,227
8	Franklin, . . .	1,168	796,450	354,925	1,410,447	2,112,467	347,095
9	Hollbrook, . . .	1,157	489,850	446,800	1,363,202	2,013,700	203,698
10	Hyde Park, . . .	504	472,264	170,218	496,790	866,471	199,463
11	Medfield, . . .	627	385,900	194,723	515,350	786,031	75,958
12	Medway, . . .	1,132	311,500	392,891	777,780	1,366,600	195,929
13	Milton, . . .	219	541,800	98,395	410,275	614,430	105,760
14	Needham, . . .	917	562,050	271,173	767,036	1,277,381	239,172
15	Norfolk, . . .	110	124,500	26,999	248,343	318,500	43,158
16	Norwood, . . .	295	367,400	150,885	940,414	1,204,450	113,151
17	Quincy, . . .	1,374	712,300	566,513	897,710	1,843,321	379,098
18	Randolph, . . .	806	257,000	328,793	820,625	1,354,165	204,747
19	Sharon, . . .	144	89,400	34,114	110,102	171,513	27,297
20	Stoughton, . . .	803	636,000	313,724	1,119,780	1,742,474	308,970
21	Walpole, . . .	277	266,550	88,346	624,120	824,896	112,430
22	Weymouth, . . .	2,843	1,428,230	1,244,786	2,616,886	4,556,927	695,255
23	Wrentham, . . .	468	192,600	203,142	212,600	529,900	114,158

PROFITS AND EARNINGS—BY CITIES AND TOWNS.—Con.

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employé.	Average yearly net profit per employé.	Average yearly earnings of each employé.	
12.74	\$92,508	\$15,069	62.30	24.96	10.96	1.78	\$1,055	\$18 00	\$263	18
12.36	228,650	21,214	64.06	23.58	11.31	1.05	1,692	17 00	399	19
9.51	257,826	-39,200	68.97	21.52	11.22	-1.71	1,830	-31 00	394	20
7.85	33,539	-8,139	87.23	4.92	10.36	-2.51	6,603	-166 00	325	21
20.82	2,074	1,421	74.85	4.33	12.36	8.46	2,397	203 00	103	22
13.56	5,680	660	67.48	18.96	12.15	1.41	1,508	21 00	285	23
24.29	4,006,907	2,955,383	54.92	20.79	13.98	10.31	1,393	143 00	289	24
18.04	336,618	174,933	63.16	18.80	11.87	6.17	1,973	122 00	371	25
9.73	615,515	-73,913	64.18	26.09	11.06	-1.33	1,596	-21 00	416	26
31.86	285,490	423,985	54.31	13.83	12.82	19.04	2,307	439 00	319	27
13.60	184,289	2,647	69.19	17.21	13.41	.19	1,605	3 09	276	28
23.90	28,711	31,664	47.68	28.42	11.37	12.53	1,435	179 00	407	29
12.04	420,388	12,655	67.17	20.79	11.69	.35	1,803	6 34	374	30
15.89	235,755	63,233	63.06	21.05	12.57	3.32	2,066	68 00	434	31
7.58	12,838	-4,369	78.83	13.59	11.49	-3.91	2,146	-84 00	291	32
11.98	111,513	-138	73.58	14.44	11.99	.01	1,735	-25	251	33
23.93	65,678	76,242	56.26	19.81	11.07	12.86	1,206	167 00	258	34
19.16	8,073	4,180	50.60	21.24	12.62	6.54	789	51 00	167	35
28.63	43,514	38,013	51.50	19.87	15.28	13.35	1,058	141 00	210	36
10.83	633,671	-45,836	81.56	7.61	11.63	-.80	5,715	-46 00	434	37
11.50	294,389	3,575	68.40	20.10	11.37	.13	1,864	2 57	374	38
14.79	31,198	5,124	73.29	11.92	12.71	2.08	2,922	61 00	348	39
13.23	9,586	919	75.55	11.22	12.07	1.16	3,052	35 00	342	40
27.93	11,700	12,436	62.73	9.34	13.54	14.39	3,085	444 00	288	41
13.15	40,962	-5,762	64.06	22.79	15.30	-2.15	1,408	-30 00	321	42
16.20	7,982	3,088	71.18	12.62	11.69	4.51	2,732	123 00	344	43
19.98	178,760	32,625	49.87	30.15	16.90	3.08	922	28 00	278	44
14.59	500,876	1,966	46.39	39.02	14.53	.06	1,087	62	424	45
23.51	241,780	191,362	56.96	19.53	13.12	10.39	2,450	254 00	478	46
6.71	130,274	-47,895	70.86	22.43	10.60	-3.89	2,173	-84 00	487	47
28.71	107,906	129,347	59.36	11.93	13.06	15.65	2,437	381 00	290	48
40.04	9,105	18,920	41.73	18.23	13.01	27.03	1,227	331 00	223	49
20.36	241,840	181,296	71.35	8.29	11.63	8.73	3,645	318 00	301	30
15.08	668,283	170,030	69.54	15.38	12.02	3.06	2,519	77 00	387	51
25.99	62,697	58,874	59.79	14.22	13.40	12.59	2,598	327 00	369	1
11.68	83,371	-8,454	69.23	19.09	12.99	-1.31	1,875	-24 00	357	2
20.73	66,296	28,595	38.14	41.13	14.48	6.25	1,500	93 00	616	3
3.85	208,019	-148,510	78.87	17.28	13.43	-9.55	2,093	-200 00	361	4
10.10	2,868	-746	70.48	19.42	13.65	-3.55	2,333	-82 00	453	5
24.84	205,683	107,542	53.64	21.52	16.31	8.53	1,898	161 00	408	6
5.82	137,701	-75,474	66.28	27.90	12.88	-7.06	681	-48 00	190	7
16.43	239,034	88,061	66.77	16.80	12.26	4.17	1,808	75 00	303	8
10.11	230,761	-27,063	67.70	22.19	11.45	-1.34	1,740	-23 00	386	9
23.02	114,983	84,480	57.33	19.65	13.27	9.75	1,719	167 00	337	10
9.66	101,757	-25,799	65.57	24.77	12.94	-3.28	1,253	-41 00	310	11
14.33	155,350	40,579	56.92	28.75	11.36	2.97	1,207	35 00	347	12
17.21	93,951	11,809	66.77	16.02	15.29	1.92	2,805	53 00	449	13
18.72	161,461	77,711	60.05	21.23	12.64	6.08	1,393	84 00	295	14
13.54	39,320	3,838	77.98	8.48	12.34	1.20	2,895	34 00	245	15
9.40	142,489	-29,338	78.08	12.52	11.83	-2.43	4,082	-99 00	511	16
20.56	227,070	152,028	48.70	30.74	12.32	8.24	1,341	110 00	412	17
15.11	150,837	53,910	60.60	24.29	11.13	3.98	1,680	66 00	407	18
15.91	22,515	4,782	64.20	19.89	13.12	2.79	1,191	33 00	236	19
17.73	212,407	96,563	64.36	18.01	12.19	5.54	2,169	120 00	390	20
13.62	98,483	13,947	75.67	10.71	11.93	1.69	2,978	50 00	319	21
15.25	541,387	153,868	57.43	27.32	11.88	3.37	1,603	54 00	438	22
21.54	64,546	49,612	40.12	38.34	12.18	9.36	1,132	106 00	434	23

PROFITS AND EARNINGS—BY CITIES AND TOWNS—Con.

	COUNTIES, CITIES AND TOWNS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
COUNTY OF PLYMOUTH.							
1	Abington, . . .	435	\$208,800	\$211,091	\$390,335	\$669,150	\$67,724
2	Bridgewater, . . .	518	628,000	212,958	807,018	1,110,532	90,556
3	Brookton, . . .	4,725	1,663,716	2,279,934	5,433,333	8,750,992	1,037,725
4	Carver, . . .	103	62,300	32,710	57,685	108,622	18,227
5	Duxbury, . . .	67	46,300	17,250	99,950	142,700	25,500
6	East Bridgewater, . . .	386	252,250	119,644	186,501	422,441	116,296
7	Halifax, . . .	23	11,520	3,343	12,902	20,645	4,400
8	Hanover, . . .	288	138,600	100,348	311,805	527,515	115,272
9	Hanson, . . .	107	115,250	31,800	117,075	179,000	30,125
10	Hingham, . . .	358	221,500	111,752	304,822	553,416	136,842
11	Kingston, . . .	183	132,200	73,800	194,545	315,535	47,190
12	Lakeville, . . .	12	6,500	2,250	12,375	17,250	2,625
13	Marion, . . .	35	23,800	5,300	9,050	25,240	10,890
14	Marshfield, . . .	38	28,800	9,160	33,049	62,155	19,946
15	Mattapoisett, . . .	30	30,100	8,150	20,650	41,750	12,950
16	Middleborough, . . .	981	498,400	355,353	779,070	1,330,848	176,425
17	Pembroke, . . .	156	42,800	36,295	116,584	188,614	35,735
18	Plymouth, . . .	924	1,147,300	329,654	1,511,574	2,145,381	304,153
19	Plympton, . . .	80	47,000	18,798	45,186	88,799	24,815
20	Rochester, . . .	31	30,950	5,355	44,600	61,160	11,205
21	Rockland, . . .	1,532	630,500	658,848	1,478,958	2,371,586	233,780
22	Scituate, . . .	71	34,825	20,527	78,943	124,835	25,365
23	South Abington, . . .	1,623	1,262,255	695,771	1,751,286	2,720,641	273,584
24	South Scituate, . . .	346	92,050	114,496	203,520	369,590	51,574
25	Wareham, . . .	474	378,900	166,821	508,097	849,981	175,063
26	West Bridgewater, . . .	179	49,025	69,360	139,655	250,500	41,485
COUNTY OF SUFFOLK.							
1	Boston, . . .	56,813	42,750,134	23,715,140	77,586,607	123,366,137	22,064,390
2	Chelsea, . . .	1,630	2,008,150	675,478	2,274,694	3,469,616	519,444
3	Revere, . . .	89	41,500	18,010	23,200	63,800	22,590
COUNTY OF WORCESTER.							
1	Ashburnham, . . .	206	71,200	82,530	119,655	255,375	53,190
2	Athol, . . .	937	436,379	308,427	709,644	1,234,524	216,453
3	Auburn, . . .	202	134,000	52,000	164,150	240,750	24,600
4	Birre, . . .	262	141,525	82,740	169,657	330,964	78,567
5	Berlin, . . .	66	29,800	27,713	111,873	147,875	8,289
6	Blackstone, . . .	1,185	1,579,000	336,871	1,207,351	1,855,320	311,098
7	Bolton, . . .	19	15,300	3,076	15,460	24,725	6,189
8	Boylston, . . .	132	211,000	27,887	128,115	183,001	28,999
9	Brookfield, . . .	442	234,500	153,985	404,058	735,650	177,607
10	Charlton, . . .	190	108,255	69,427	224,105	378,250	84,718
11	Clinton, . . .	2,674	2,233,447	857,802	1,643,581	3,310,216	808,833
12	Dana, . . .	124	61,155	49,700	33,839	107,190	23,651
13	Douglas, . . .	361	429,700	150,900	245,354	514,623	118,369
14	Dudley, . . .	936	1,220,000	249,553	867,344	1,590,053	473,156
15	Fitchburg, . . .	2,283	2,527,451	997,270	2,633,898	4,597,578	966,410
16	Gardner, . . .	1,212	1,335,250	541,736	1,165,850	1,954,555	246,969
17	Grafton, . . .	720	672,500	227,285	834,858	1,218,328	156,185
18	Hardwick, . . .	21	8,360	4,246	21,961	34,420	8,213
19	Harvard, . . .	50	62,200	11,550	59,225	83,325	12,550
20	Holden, . . .	538	431,000	160,695	654,195	1,052,699	237,809
21	Hubbardston, . . .	90	58,750	21,603	92,347	161,700	47,750
22	Lancaster, . . .	159	154,700	43,163	141,084	234,770	50,523
23	Leicester, . . .	535	863,400	197,330	972,207	1,498,066	328,529
24	Leominster, . . .	1,583	862,690	594,433	904,723	1,804,955	395,799
25	Lunenburg, . . .	42	71,775	12,015	256,285	356,025	87,725
26	Mendon, . . .	46	17,850	17,665	96,650	132,768	18,453
27	Millford, . . .	2,431	1,327,600	936,166	2,161,857	3,541,561	443,538
28	Millbury, . . .	1,057	1,010,300	413,310	1,180,275	1,911,805	318,220

PROFITS AND EARNINGS—BY CITIES AND TOWNS—Con.

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	
10.12	\$79,443	—\$11,719	58.33	31.55	11.87	—1.75	\$1,538	—\$26 00	\$485	1
8.16	148,733	—58,177	72.07	19.17	13.39	—5.23	2,143	—112 00	411	2
11.85	974,922	62,803	62.09	26.06	11.14	.71	1,852	13 00	482	3
16.78	14,600	3,627	53.11	30.11	13.44	3.34	1,054	55 00	317	4
17.86	17,048	8,452	70.05	12.09	11.94	5.92	2,129	126 00	257	5
27.52	57,379	58,917	44.15	28.33	13.58	13.94	1,094	152 00	309	6
21.31	2,756	1,644	62.50	16.19	13.55	7.96	897	71 00	145	7
21.85	61,068	54,204	59.13	19.02	11.58	10.27	1,831	188 00	348	8
16.83	24,815	5,310	65.41	17.76	13.87	2.96	1,672	49 00	297	9
24.72	68,632	68,210	55.08	20.20	12.40	12.32	1,545	190 00	312	10
14.95	39,487	7,703	61.66	23.39	12.51	2.44	1,724	42 00	403	11
15.21	2,115	510	71.74	13.05	12.26	2.95	1,437	42 00	187	12
43.14	3,952	6,938	35.86	21.00	15.65	27.49	721	198 00	151	13
32.09	7,944	12,002	53.17	14.74	12.78	19.31	1,635	315 00	241	14
31.01	5,981	6,969	49.47	19.52	14.32	16.69	1,301	232 00	271	15
13.25	162,989	13,436	60.05	26.70	12.24	1.01	1,356	13 00	392	16
18.94	21,429	14,306	61.81	19.25	11.36	7.58	1,209	91 00	232	17
14.17	283,376	20,777	70.46	15.37	13.21	.96	2,321	22 00	356	18
27.94	11,700	13,115	50.89	21.17	13.17	14.77	1,169	163 00	234	19
18.32	7,973	3,232	72.92	8.76	13.04	5.28	1,972	104 00	172	20
9.86	274,989	—41,209	62.36	27.78	11.59	—1.73	1,548	—26 00	439	21
20.31	14,573	10,792	63.24	16.45	11.67	8.64	1,758	152 00	289	22
10.06	347,799	—74,215	64.37	25.57	12.78	—2.72	1,676	—45 00	328	23
13.95	42,482	9,092	55.07	30.98	11.49	2.46	1,068	26 00	430	24
20.59	107,732	67,331	59.78	19.63	12.67	7.92	1,793	142 00	351	25
16.56	27,992	13,493	55.75	27.69	11.18	5.38	1,399	75 00	387	26
17.88	14,901,622	7,162,768	62.89	19.23	12.08	5.80	2,171	126 00	417	1
14.97	467,451	51,993	65.56	19.47	13.47	1.50	2,129	32 00	414	2
35.40	8,870	13,720	36.37	28.23	13.90	21.50	716	154 00	202	3
20.82	29,810	23,380	46.86	32.32	11.67	9.15	1,239	113 00	400	1
17.53	149,635	66,818	57.48	24.99	12.12	5.41	1,317	71 00	329	2
10.21	32,115	—7,515	68.19	21.60	13.33	—3.12	1,192	—37 00	257	3
23.73	41,583	36,979	51.27	25.00	12.56	11.17	1,263	141 00	315	4
5.60	16,576	—8,287	75.66	18.74	11.20	—5.60	2,240	—125 00	419	5
16.76	280,272	30,826	65.08	18.16	15.10	1.66	1,565	26 00	284	6
25.03	3,391	2,798	62.53	12.44	13.71	11.32	1,301	147 00	161	7
15.67	31,160	—2,161	69.25	15.08	16.84	—1.17	1,401	—16 00	211	8
24.14	87,635	89,972	54.93	20.93	11.91	12.23	1,664	203 00	348	9
22.39	44,320	40,398	59.25	18.36	11.71	10.68	1,990	212 00	365	10
24.43	465,028	343,805	49.65	25.92	14.05	10.38	1,237	128 00	320	11
22.06	14,388	9,263	31.57	46.37	13.42	8.64	864	74 00	400	12
23.00	77,244	41,125	47.68	29.32	15.00	8.00	1,425	113 00	418	13
29.75	232,205	240,951	54.55	15.70	14.60	15.15	1,698	257 00	266	14
21.01	611,405	355,005	57.29	21.70	13.29	7.72	2,013	155 00	436	15
12.63	275,571	—28,602	59.65	27.72	14.09	—1.46	1,612	—23 00	446	16
12.81	162,183	—5,998	68.53	18.66	13.31	—1.50	1,692	—8 33	315	17
23.86	3,944	4,269	63.80	12.34	11.46	12.40	1,639	203 00	202	18
15.06	12,065	485	71.08	13.86	14.48	.58	1,666	9 70	231	19
22.59	131,130	106,679	62.14	15.27	12.46	10.13	1,956	198 00	298	20
29.53	19,695	28,055	57.11	13.36	12.18	17.35	1,796	311 00	240	21
21.52	32,759	17,764	60.09	18.39	13.95	7.57	1,476	111 00	271	22
21.93	201,731	128,798	64.90	13.17	13.47	8.46	2,800	237 00	368	23
20.88	241,257	154,542	47.75	31.37	12.73	8.15	1,197	97 00	375	24
24.64	39,909	47,816	71.99	3.37	11.21	13.43	8,476	1,138 00	286	25
13.89	14,348	4,105	72.80	13.31	10.80	3.09	2,856	89 00	384	26
12.52	433,812	9,726	61.04	26.44	12.25	.27	1,456	4 00	385	27
16.64	251,799	66,421	61.74	21.62	13.17	3.47	1,809	63 00	391	28

PROFITS AND EARNINGS — BY CITIES AND TOWNS — Con.

	COUNTIES, CITIES AND TOWNS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
	COUNTY OF WORCESTER — Con.						
29	New Braintree,*.	4	\$4,132	\$1,251	\$5,275	-	-
30	Northborough, .	451	276,200	124,706	243,798	\$786,063	\$417,559
31	Northbridge, .	1,403	1,472,125	461,341	732,277	1,540,924	347,306
32	North Brookfield,	1,626	351,300	554,799	1,671,611	2,456,714	230,304
33	Oakham, . . .	45	25,600	8,299	84,581	107,283	14,403
34	Oxford, . . .	554	420,200	131,709	434,720	699,400	132,971
35	Paxton, . . .	18	7,050	4,537	21,175	33,395	7,633
36	Petersham, . .	33	20,700	6,695	24,207	40,265	9,363
37	Phillipston, . .	15	9,850	4,597	12,335	21,943	5,011
38	Princeton, . .	45	30,650	13,467	37,240	88,350	37,643
39	Royalston, . .	128	138,000	38,005	112,061	222,095	72,029
40	Rutland, . . .	9	12,375	1,440	6,635	14,280	6,155
41	Shrewsbury, .	22	20,400	8,195	11,885	23,580	3,500
42	Southborough, .	424	301,600	155,979	389,292	626,955	81,684
43	Southbridge, .	1,422	1,666,150	372,747	1,284,325	1,892,396	235,324
44	Spencer, . . .	1,757	930,340	773,477	2,105,277	3,291,373	412,619
45	Sterling, . . .	72	59,700	23,930	104,743	153,978	25,305
46	Sturbridge, . .	420	576,100	151,481	231,864	554,699	171,354
47	Sutton, . . .	744	470,300	221,104	451,333	772,201	99,758
48	Templeton, . .	592	355,050	205,485	419,696	773,706	148,525
49	Upton, . . .	1,431	453,150	280,285	584,160	1,029,312	164,867
50	Uxbridge, . . .	696	773,200	227,988	808,436	1,312,582	276,158
51	Warren, . . .	1,313	1,281,850	408,432	1,166,429	2,138,193	563,332
52	Webster, . . .	1,479	1,038,650	445,229	1,346,494	2,117,128	325,405
53	Westborough, .	1,735	494,700	506,971	1,084,518	1,725,775	134,286
54	West Boylston, .	705	564,000	153,655	418,856	763,103	190,592
55	West Brookfield,	312	148,100	102,505	278,813	474,023	92,707
56	Westminister, .	261	128,800	65,450	214,405	333,850	53,995
57	Winchendon, .	727	698,100	220,912	596,872	1,028,313	210,529
58	Worcester, . .	14,332	10,101,904	5,932,921	15,021,324	24,758,457	3,804,212

PROFITS AND EARNINGS—BY CITIES AND TOWNS—Con.

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employé.	Average yearly net profit per employé.	Average yearly earnings of each employé.	
-	\$1,160	-	-	-	-	-	-	-	\$312	29
53.12	95,178	\$322,381	31.02	15.86	12.11	41.01	\$1,742	\$714 00	276	30
23.53	242,420	104,886	47.53	29.94	15.73	6.80	1,098	74 00	328	31
9.37	266,749	-36,445	68.04	22.59	10.85	-1.48	1,510	-22 00	341	32
13.42	12,264	2,139	78.84	7.74	11.43	1.99	2,384	47 00	184	33
19.01	95,692	37,279	62.16	18.83	13.68	5.33	1,197	63 00	225	34
23.00	3,763	3,920	63.41	13.59	11.26	11.74	1,855	217 00	252	35
23.25	5,269	4,094	60.12	16.63	13.08	10.17	1,220	124 00	202	36
22.83	2,785	2,226	56.22	20.95	12.69	10.14	1,462	148 00	306	37
42.60	10,674	26,969	42.15	15.25	12.08	30.52	1,963	599 00	299	38
32.43	30,490	41,539	50.46	17.11	13.73	18.70	1,735	324 00	296	39
43.09	2,171	3,984	46.82	10.09	15.20	27.89	1,586	442 00	160	40
14.85	3,582	-82	50.40	34.75	15.19	-34	1,071	-3 72	372	41
13.02	80,792	892	62.10	24.88	12.88	.14	1,478	2 10	367	42
12.44	289,209	-53,885	67.87	19.69	15.28	-2.84	1,330	-37 00	262	43
12.53	384,958	27,661	63.97	22.50	11.69	.84	1,873	15 00	440	44
16.43	18,980	6,325	68.03	15.54	12.32	4.11	2,138	87 00	332	45
30.89	90,036	81,318	41.80	27.31	16.23	14.66	1,320	193 00	360	46
12.92	105,438	-5,680	58.45	28.63	13.65	-1.73	1,037	-7 63	297	47
19.19	98,674	49,851	54.25	26.56	12.75	6.44	1,306	84 00	347	48
16.01	130,120	34,747	56.76	27.23	12.64	3.37	719	24 00	195	49
21.04	177,650	98,508	61.59	17.37	13.53	7.51	1,885	142 00	327	50
26.34	290,730	272,602	54.56	19.10	13.59	12.75	1,628	208 00	311	51
15.37	274,032	51,373	63.60	21.03	12.94	2.43	1,431	34 00	301	52
7.78	202,260	-67,974	62.84	29.38	11.71	-3.93	994	-39 00	292	53
24.97	110,150	80,442	54.89	20.14	13.13	11.84	1,082	114 00	218	54
19.55	56,289	36,418	58.82	21.63	11.87	7.68	1,519	116 00	328	55
16.17	41,113	12,882	64.22	19.61	12.31	3.86	1,279	49 00	250	56
20.47	144,717	65,812	58.05	21.48	14.07	6.40	1,414	90 00	303	57
15.36	3,081,960	722,252	60.67	23.97	12.45	2.91	1,727	50 00	414	58

PROFITS AND EARNINGS — BY INDUSTRIES.

	INDUSTRIES.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
1	Agricultural imple- ments,	971	\$900,500	\$365,396	\$631,552	\$1,663,392	\$666,444
2	Arms and ammu- nition,	1,495	3,540,055	693,037	530,478	1,342,496	118,981
3	Artificial teeth and dental work, . . .	32	119,825	18,438	36,552	125,514	70,524
4	Artisans' tools, . .	2,468	2,800,774	1,027,772	1,053,266	2,725,270	644,232
5	Awnings and tents, .	64	22,700	24,350	52,240	92,750	16,160
6	Boots and shoes, . .	65,552	22,656,523	26,070,266	66,357,826	105,118,299	12,690,207
7	Boxes,	2,228	1,012,355	683,576	1,565,317	2,813,621	564,728
8	Brick, tiles, and sewer pipe,	2,254	1,498,000	426,699	443,379	1,162,966	292,888
9	Brooms, brushes, . .	949	537,500	280,554	817,387	1,429,160	331,219
10	Building,	13,681	4,605,700	6,035,972	10,704,353	20,677,929	3,937,604
11	Burial cases, cask- ets, coffins, etc., .	226	361,300	138,181	266,262	488,935	84,492
12	Buttons and dress trimmings,	1,095	675,000	335,724	480,479	1,140,114	323,911
13	Carpetings,	3,349	3,812,147	955,194	3,190,391	5,191,490	1,045,905
14	Carriages and wag- ons,	3,761	2,871,281	1,740,356	2,705,963	5,708,295	1,261,976
15	Cement, kaolin, lime, and plaster, .	145	75,600	49,425	64,850	164,750	50,475
16	Charcoal,	1	800	450	1,000	2,000	550
17	Chemical prepara- tions,	23	171,750	9,812	70,433	97,949	17,704
18	Clocks and watches, .	1,576	1,786,350	876,974	736,053	1,902,203	289,176
19	Clothing,	19,316	7,450,414	5,883,574	16,264,315	27,253,582	5,105,693
20	Concrete walks, paving, etc., . . .	18	12,000	8,260	14,360	28,000	5,380
21	Cooking, lighting, and heating appa- ratus,	1,424	1,805,700	706,316	733,677	2,001,459	561,466
22	Cordage and twine, . .	1,238	1,713,150	384,601	2,362,237	3,271,741	524,903
23	Corks,	78	38,434	23,249	68,467	124,434	32,718
24	Cotton goods,	61,617	72,670,142	15,877,096	36,644,605	68,566,182	16,044,481
25	Cotton, woollen, and other textiles, . . .	4,805	6,002,185	1,526,926	4,684,995	8,557,209	2,345,288
26	Crayons, pencils, crucibles, etc., . .	36	65,500	17,724	42,070	75,452	15,658
27	Drugs and medi- cines,	766	1,461,000	358,479	1,619,907	2,993,712	1,015,326
28	Dyeing and finish- ing textiles,	4,945	8,613,500	1,815,431	4,566,174	9,482,939	3,101,334
29	Dyestuffs,	64	161,000	29,994	190,411	300,514	80,409
30	Earthen and stone- ware,	202	177,500	89,325	46,240	229,326	93,771
31	Electroplating, . . .	144	141,350	61,166	88,390	253,600	104,044
32	Emery and sand paper and cloth, etc.,	142	348,500	64,057	241,773	465,572	159,742
33	Fancy articles, . . .	162	125,375	33,375	45,500	110,200	31,325
34	Fertilizers,	480	1,653,050	210,866	1,330,650	2,975,080	533,564
35	Fire works and matches,	81	70,500	29,636	106,361	161,474	25,477
36	Flax and linen goods,	1,345	1,225,000	315,517	948,455	1,521,380	257,408
37	Food preparations, . .	6,652	11,410,708	2,819,184	59,026,652	68,035,755	6,189,919
38	Furniture,	7,445	4,982,594	3,240,630	5,558,818	11,196,827	2,097,379
39	Glass,	1,038	878,650	431,853	364,494	968,685	172,338
40	Glue, isinglass, and starch,	295	405,400	105,529	414,384	616,121	96,208

PROFITS AND EARNINGS — BY INDUSTRIES.

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	
40.06	\$220,369	\$446,075	37.97	21.97	13.24	26.82	\$1,713	\$459 00	\$376	1
8.87	346,653	—227,672	39.51	51.62	25.82	—16.95	897	—152 00	463	2
56.19	19,741	50,783	29.12	14.69	15.73	40 46	3,922	1,587 00	576	3
23.64	440,573	203,659	38.65	37.71	16.17	7.47	1,104	82 00	416	4
17.43	10,937	5,523	56.32	26.25	11.47	5.96	1,449	86 00	380	5
12.07	11,871,221	818,986	63.13	24.80	11.29	.78	1,603	12 00	397	6
20.07	542,103	222,625	55.63	24.30	12.16	7.91	1,262	99 00	306	7
25.18	206,177	86,711	38 12	36.69	17.74	7.45	315	38 00	189	8
23.18	175,166	156,053	57.19	19.63	12.26	10.92	1,505	164 00	295	9
19.04	2,344,135	1,593,469	51.76	29.20	11.33	7.71	1,511	116 00	441	10
17.28	70,572	13,920	54.46	28.26	14.43	2 85	2,163	61 00	611	11
28.41	154,511	169,400	42.14	29.45	13.55	14.86	1,041	153 00	306	12
20.15	747,878	298,027	61.45	18.40	14.41	5.74	1,550	88 00	285	13
22.11	743,006	518,970	47.40	30 49	13.02	9.09	1,517	138 00	462	14
30.64	21,011	29,464	39.36	30 00	12.75	17.89	1,136	203 00	340	15
27.50	248	302	50.00	22.50	12.40	15.10	2,000	302 00	450	16
18.07	20,100	—2,396	71.91	10.02	20.52	—2.45	4,258	—104 00	426	17
15.20	297,401	—8,225	38.70	46.10	15.63	—4.3	1,206	—5 21	556	18
18.73	3,172,383	1,933,310	59.68	21.59	11.64	7.09	1,411	100 00	304	19
19.21	3,520	1,860	51.29	29.50	12.57	6.64	1,555	103 00	458	20
28.05	308,488	252,978	36.66	35 29	15.41	12 64	1,405	177 00	496	21
16.04	429,963	94,940	72.20	11.76	13.14	2.90	2,642	76 00	310	22
26.29	14,749	17,969	55.02	18.69	11.85	14 44	1,595	230 00	298	23
23.39	11,216,827	4,827,654	53.45	23.16	16.35	7.04	1,112	78 00	258	24
27.41	1,215,852	1,129,436	54.75	17.84	14.21	13.20	1,780	235 00	317	25
20.75	11,475	4,183	55.76	23.49	15.20	5.55	2,095	116 00	492	26
33.92	387,031	628,295	54.11	11.97	12.93	20.99	3,908	821 00	467	27
32.70	1,465,104	1,636,230	48.15	19.15	15.45	17.25	1,917	339 00	367	28
26.73	39,741	40,668	63.30	9.97	13.21	13.52	4,700	635 00	468	29
40.88	33,584	60,187	20.17	38.95	14.64	26.24	1,135	297 00	442	30
41.02	33,841	70,293	34.86	24.12	13 34	27.68	1,761	487 00	424	31
34.31	67,467	92,275	51.93	13.76	14.49	19.82	3,278	649 00	451	32
28 42	18,543	12,782	41.29	30 29	16.82	11.60	680	78 00	206	33
25.71	306,691	226,873	64.13	10.16	14.78	10.93	4,323	473 00	439	34
15.77	20,377	5,100	65.87	18.36	12.62	3.15	1,993	62 00	365	35
16.91	225,638	31,770	62 35	20.74	14.83	2.08	1,131	23 00	234	36
9.09	7,488,218	—1,298,293	86.76	4.15	11.00	—1.91	10,228	—194 00	423	37
18.73	1,418,638	678,741	52.23	28.94	12.66	6.07	1,593	91 00	435	38
17.79	149,588	22,750	37.63	44.58	15.45	2.34	933	21 00	416	39
15.61	85,936	10,272	67.26	17.13	13.95	1 66	2,088	34 00	357	40

PROFITS AND EARNINGS — BY INDUSTRIES — Continued.

	INDUSTRIES.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
41	Hair work, . . .	91	\$35,700	\$24,617	\$48,960	\$102,200	\$28,623
42	Hose; rubber, linen, etc., . . .	25	55,000	7,057	41,777	58,487	9,653
43	Industries not specified,* . . .	3,585	4,230,030	1,453,833	4,832,980	8,094,542	1,807,729
44	Ink, mucilage, and paste, . . .	47	136,000	22,970	71,900	125,900	31,120
45	Ivory, bone, and horn goods, . .	1,146	420,400	377,597	365,419	909,347	226,331
46	Jewelry burnish- ing and lapidary work, . . .	51	45,500	24,482	61,575	119,700	33,643
47	Leather, . . .	8,863	9,358,324	3,818,925	22,398,914	30,188,959	3,971,020
48	Liquors and bev- erages, . . .	257	203,675	109,459	208,205	459,633	141,969
49	Liquors, malt and distilled, . . .	1,338	3,869,240	631,375	3,595,106	6,216,618	1,990,137
50	Lumber, . . .	2,376	2,959,990	591,202	2,541,430	4,041,950	903,318
51	Machines and ma- chinery, . . .	14,263	14,455,406	6,901,109	9,796,143	20,894,545	4,197,293
52	Metals and metallic goods, . . .	24,621	22,313,542	10,410,038	21,751,921	40,190,560	8,028,610
53	Mixed textiles, . .	7,498	7,166,800	2,528,476	7,570,885	13,043,820	2,944,468
54	Models and pat- terns, . . .	126	49,550	58,224	22,975	136,033	54,834
55	Musical instru- ments and mate- rials, . . .	3,111	3,259,266	1,809,626	2,165,641	5,012,799	1,037,532
56	Oils and illuminat- ing fluids, . . .	100	255,400	40,898	562,737	717,385	113,750
57	Paints, colors, and chemicals, . . .	143	384,500	75,390	466,293	657,960	116,277
58	Paper, . . .	8,375	12,432,846	2,847,903	11,618,091	18,358,361	3,892,367
59	Perfumes and toilet preparations, . .	110	99,100	41,990	172,920	380,600	165,690
60	Photographs and photographic ma- terials, . . .	649	364,450	241,315	257,759	734,288	235,214
61	Polishes and dress- ing, . . .	206	302,500	95,336	692,230	1,039,125	251,560
62	Printing and pub- lishing, . . .	7,413	4,940,432	3,787,404	3,698,591	10,474,684	2,988,689
63	Printing, dyeing, and bleaching, . .	750	569,200	255,111	724,094	1,741,629	762,424
64	Railroad construc- tion, . . .	680	789,684	291,789	974,360	1,366,485	100,336
65	Rubber and elastic goods, . . .	3,494	3,077,000	1,145,170	4,470,173	6,990,856	1,375,513
66	Salt, . . .	8	9,000	1,030	20	3,800	2,750
67	Scientific instru- ments and ap- pliances, . . .	596	477,400	306,217	391,988	937,544	239,339
68	Shipbuilding, . . .	1,328	1,765,450	804,571	1,173,640	2,281,665	303,455
69	Silk and silk goods, .	1,826	1,306,900	521,725	1,990,515	3,764,260	1,252,020
70	Sporting goods, . .	245	339,300	68,425	354,052	496,790	74,313
71	Stone, . . .	2,451	1,434,789	999,851	1,137,389	2,951,664	814,424
72	Straw goods, . . .	7,782	2,316,260	1,892,667	4,083,212	6,798,628	822,749
73	Tallow, candles, soap, and grease, .	833	2,081,225	371,799	3,615,095	4,751,735	764,841
74	Tobacco, . . .	1,445	712,411	601,455	1,109,841	2,099,459	388,163

* In the city of Boston.

PROFITS AND EARNINGS—BY INDUSTRIES—Continued.

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	
28.00	\$12,362	\$16,261	47.91	24.09	12.09	15.91	\$1,123	\$178 00	\$270	41
16.50	9,149	504	71.43	12.07	15.64	.86	2,339	20 00	252	42
22.33	1,063,256	744,473	59.71	17.96	13.14	9.19	2,257	207 00	405	43
24.70	20,759	10,361	57.07	18.23	16.48	8.22	2,680	220 00	488	44
23.34	122,164	104,167	37.71	38.95	12.60	10.74	845	90 00	329	45
28.10	14,700	18,943	51.45	20.45	12.28	15.82	2,347	371 00	480	46
13 15	3,580,385	390,635	74.20	12.65	11.86	1.29	3,406	44 00	430	47
30.88	58,184	83,785	45.30	23.82	12.66	18.22	1,788	326 00	425	48
32.01	853,816	1,136,321	57.83	10.16	13.74	18.27	4,646	849 00	471	49
22.49	581,794	327,524	62.85	14.63	14.39	8.10	1,701	138 00	249	50
20.09	2,956,779	1,240,514	46.89	33.02	14.15	5.94	1,464	87 00	484	51
19.97	5,357,869	2,670,741	54.13	25.90	13.33	6.64	1,632	108 00	422	52
22.57	1,734,391	1,210,077	58.04	19.39	13.29	9.28	1,739	161 00	337	53
40.30	16,576	38,258	16.89	42.81	12.18	28.12	1,079	303 00	462	54
20.69	696,836	340,696	43.21	36.10	13.90	6 79	1,611	109 00	581	55
15 85	87,963	26,687	78.45	5.70	12.13	3.72	7,173	266 00	408	56
17.67	88,866	—27,411	70 87	11 46	13.51	—4 16	4,601	—191 00	527	57
21.20	2,581,807	1,310,560	63.29	15.51	14.06	7 14	2,192	156 00	340	58
43.53	44,006	121,684	45.44	11.03	11.56	31 97	3,460	1,106 00	381	59
32.03	95,296	139,918	35.10	32.87	12 97	19.06	1,131	216 00	371	60
24.20	122,063	129,497	66.62	9.18	11.74	12 46	5,044	628 00	462	61
28.53	1,343,894	1,644,795	35.31	36.16	12.82	15.71	1,413	221 00	510	62
43.77	208,315	554,109	41 58	14.65	11.96	31.81	2,322	738 00	340	63
7.34	184,030	—83,684	71.31	21.35	13.46	—6.12	2,009	—123 00	429	64
19.67	583,706	491,807	63.95	16.38	12.64	7.03	2,000	140 00	327	65
72.36	920	1,830	.53	27.11	24.21	48.15	475	229 00	128	66
25.52	122,398	116,941	41.81	32.67	13.05	12.47	1,573	199 00	513	67
13.30	334,094	—30,639	51.44	35.26	14.64	—1.34	1,718	—23 00	605	68
33.26	454,840	797,189	52.88	13.86	12.08	21 18	2,061	436 00	285	69
14.95	70,037	4,276	71.27	13.78	14.09	.86	2,027	17 00	279	70
27.59	381,254	433,170	38.53	33.88	12 92	14.67	1,204	176 00	407	71
12.10	818,838	3,911	60.06	27.84	12.04	.06	873	50	243	72
16.09	600,047	164,794	76.08	7.82	12 62	3.48	5,704	198 00	446	73
18.48	252,691	135,472	52.87	28.65	12.03	6.45	1,452	93 00	416	74

PROFITS AND EARNINGS — BY INDUSTRIES — Concluded.

	INDUSTRIES.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
75	Toys and games, .	461	\$192,000	\$142,713	\$111,985	\$343,972	\$89,274
76	Trunks and valises,	183	111,500	92,163	251,511	430,391	86,717
77	Whips,	497	632,610	226,284	376,593	962,192	359,515
78	Wooden goods, .	4,783	3,911,954	1,891,703	3,551,940	6,522,555	1,278,912
79	Woollen goods, .	26,109	25,735,845	7,818,302	28,954,108	47,473,668	10,701,258
80	Worsted goods, .	2,488	1,874,162	723,105	3,445,009	4,983,795	815,681

These statistics stand as statements of fact. Their comparative value cannot be fully shown until equally as comprehensive figures for other States and countries are secured. Again, they are in themselves so explicit that a comparison here of one town or city with another, or of one industry with another, seems needless, and they are therefore submitted without detailed comment.

An average wage for an entire establishment, city or town or industry, is necessarily based on the wages paid to men,

PROFITS AND EARNINGS — BY INDUSTRIES — Concluded.

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	
25.95	\$45,917	\$43,357	32.56	41.49	13.35	12.60	\$746	\$94 00	\$309	75
20.14	49,729	36,988	58.44	21.42	11.55	8.59	2,351	202 00	503	76
37.36	134,176	225,339	39.12	23.52	13.94	23.42	1,936	453 00	455	77
19.60	886,973	391,939	51.39	29.01	13.60	6.00	1,363	82 00	396	78
22.54	6,291,518	4,409,749	60.99	16.47	13.25	9.29	1,818	169 00	299	79
16.36	610,829	204,352	69.13	14.51	12.25	4.11	2,003	84 00	290	80

women, youth, and children. Such an average wage figure is consequently smaller than the average amount paid to men only, and larger than the actual average wage of women and children as a class. In the following table we show the percentage of men, women, and children and youth employed in the manufacturing and mechanical industries of the Commonwealth, and the average yearly earnings of each employe. The higher yearly earnings in most of the industries where men predominate will be readily seen.

EMPLOYÉS: MEN, WOMEN, CHILDREN, AND YOUTH — BY INDUSTRIES.

INDUSTRIES.	Average yearly earnings of each employé.	Percent- age of men.	Percent- age of women.	Percent- age of children and youth.	REMARKS.
Agricultural implements,	\$376	97.9	.1	2	Nearly all men.
Arms and ammunition, .	463	90	7	3	Nine-tenths men.
Artificial teeth and den- tal work,	576	97	—	3	Nearly all men.
Artisans' tools,	416	91	4	5	Nine-tenths men.
Awnings and tents, . . .	380	30	67	3	Seven-tenths women and children.
Boots and shoes,	397	75	23	2	Three-quarters men.
Boxes,	306	51	46	3	Nearly equal division.
Brick, tiles, and sewer pipe,	189	99.01	.09	.9	Nearly all men.
Brooms and brushes, . .	295	72.1	27	.9	More than seven-tenths men.
Building,	441	99.1	.39	.51	Nearly all men.
Burial cases, caskets, cof- fins, etc.,	611	87.6	12	.4	More than five-sixths men.
Buttons and dress trim- mings,	306	27	64	9	Nearly three quarters wo- men and children.
Carpetings,	285	44	55	1	Majority women and chil- dren.
Carriages and wagons, . .	462	99.09	.80	.11	Nearly all men.
Cement, kaolin, lime, and plaster,	340	100	—	—	All men.
Charcoal,	450	100	—	—	All men.
Chemical preparations, . .	426	100	—	—	All men.
Clocks and watches, . . .	556	64	36	—	Nearly two-thirds men.
Clothing,	304	25	72	3	Three-quarters women and children.
Concrete walks, paving, etc.,	458	100	—	—	All men.
Cooking, lighting, and heating apparatus, . . .	496	99.9	—	.1	Nearly all men.
Cordage and twine, . . .	310	76	18	6	More than three-quarters men.
Corks,	298	56	36	8	Majority men.
Cotton goods,	258	37	51	12	Nearly two-thirds women and children.
Cotton, woollen, and other textiles,	317	35	54	11	Nearly two-thirds women and children.
Crayons, pencils, cruci- bles, etc.,	402	81	11	8	More than four-fifths men.
Drugs and medicines, . .	467	80	19	1	Four-fifths men.
Dyeing and finishing tex- tiles,	367	80	11	9	Four-fifths men.
Dye stuffs,	468	100	—	—	All men.
Earthen and stone ware,	442	92	6	2	More than nine-tenths men.
Electroplating,	424	94	4	2	More than nine-tenths men.
Emery and sand paper and cloth, etc.,	451	96	4	—	Nearly all men.
Fancy articles,	206	33	60	7	Two-thirds women and children.
Fertilizers,	439	99.6	.4	—	Nearly all men.
Fireworks and matches, .	365	52	37	11	Majority men.

EMPLOYÉS: MEN, WOMEN, CHILDREN, AND YOUTH — BY INDUSTRIES — Continued.

INDUSTRIES.	Average yearly earnings of each employé.	Percent- age of men.	Percent- age of women.	Percent- age of children and youth.	REMARKS.
Flax and linen goods, . .	\$234	35	45	20	Nearly two-thirds women and children.
Food preparations, . . .	423	81	16	3	More than four-fifths men.
Furniture,	435	92	6	2	More than nine-tenths men.
Glass,	416	87	7	6	More than four-fifths men.
Glue, isinglass, starch, .	357	97	3	-	Nearly all men.
Hair work,	270	18	82	-	More than four-fifths women.
Hose; rubber, linen, etc.,	282	36	40	24	Nearly two-thirds women and children.
Industries not specified, .	405	67	30	3	Two-thirds men.
Ink, mucilage, and paste,	488	90	6	4	Nine-tenths men.
Ivory, bone, and horn goods,	329	80	16	4	Four-fifths men.
Jewelry burnishing and lapidary work, . . .	480	88	6	6	Nearly nine-tenths men.
Leather,	430	97	2	1	Nearly all men.
Liquors and beverages, .	425	99	-	1	Nearly all men.
Liquors, malt and distilled,	471	99.8	-	.2	Nearly all men.
Lumber,	249	99	-	1	Nearly all men.
Machines and machinery,	484	97	1	2	Nearly all men.
Metals and metallic goods,	422	88	9	3	Nearly nine-tenths men.
Mixed textiles,	337	49	45	6	Majority women and children.
Models and patterns, . .	462	98.2	1	.8	Nearly all men.
Musical instruments and materials,	581	97.1	2	.9	Nearly all men.
Oils and illuminating fluids,	408	83	15	2	More than four-fifths men.
Paints, colors, and chemicals,	527	93	6	1	More than nine-tenths men.
Paper,	340	46.2	53	.8	Majority women and children.
Perfumes and toilet preparations,	381	72.1	27	.9	Nearly three-quarters men
Photographs and photographic materials, . .	371	64.1	35	.9	Nearly two-thirds men.
Polishes and dressing, . .	462	65	34	1	Nearly two-thirds men.
Printing and publishing,	510	72	25	3	Nearly three-quarters men
Printing, dyeing, and bleaching,	340	66.3	33	.7	Two-thirds men.
Railroad construction, . .	429	98	2	-	Nearly all men.
Rubber and elastic goods,	327	41	56	3	Majority women and children.
Salt,	128	100	-	-	All men.
Scientific instruments and appliances,	513	87	9	4	Nearly nine-tenths men.
Shipbuilding,	605	100	-	-	All men.
Silk and silk goods, . .	235	20	70	10	Four-fifths women and children.
Sporting goods,	279	23.6	76	.4	Four-fifths women and children.
Stone,	407	99.92	.04	.04	Nearly all men.
Straw goods,	243	33	66	1	Two-thirds women and children.

EMPLOYÉS: MEN, WOMEN, CHILDREN, AND YOUTH — BY
INDUSTRIES — Concluded.

INDUSTRIES.	Average yearly earnings of each employé.	Percent- age of men.	Percent- age of women.	Percent- age of children and youth.	REMARKS.
Tallow, candles, soap, and grease,	\$446	93	3	4	More than nine-tenths men.
Tobacco,	416	70	28	2	Seven-tenths men.
Toys and games, . . .	309	59	30	11	Majority men.
Trunks and valises, . .	503	97	3	—	Nearly all men.
Whips,	455	67	31	2	Two-thirds men.
Wooden goods, . . .	396	89	7	4	Nearly nine-tenths men.
Woollen goods, . . .	299	52	38	10	Majority men.
Worsted goods, . . .	290	40	49	11	Three-fifths women and children.

We next present a similar showing for thirty-two cities and towns, in each of which the value of manufactured goods exceeded \$3,000,000 yearly, the whole aggregating 70 + per cent of the total value of the State's manufactures : —

COUNTIES, CITIES, AND TOWNS.	Average yearly earnings of each employé.	Percent- age of men.	Percent- age of women.	Percent- age of children and youth.	REMARKS.
COUNTY OF BERKSHIRE.					
North Adams,	\$318	52	36	12	Majority men.
Pittsfield,	323	66	26	8	Two-thirds men.
COUNTY OF BRISTOL.					
Attleborough,	416	67	29	4	Two-thirds men.
Fall River,	261	48	40	12	Majority women and chil- dren.
New Bedford,	346	66	28	6	Two-thirds men.
Taunton,	404	70	21	9	Seven-tenths men.
COUNTY OF ESSEX.					
Beverly,	432	70	28	2	Seven tenths men.
Haverhill,	348	75.4	24	.6	Three-quarters men.
Lawrence,	325	42	52	6	Majority women and chil- dren.
Lynn,	467	71.7	28	.3	More than seven-tenths men.
Newburyport,	268	59	37	4	Nearly three-fifths men.
Peabody,	454	95	4	1	Nearly all men.
Salem,	343	65	30	5	Nearly two thirds men.
COUNTY OF HAMPDEN.					
Chicopee,	286	48	39	13	Majority women and chil- dren.
Holyoke,	309	49	43	8	Majority women and chil- dren.
Springfield,	397	70	27	3	Seven-tenths men.
COUNTY OF MIDDLESEX.					
Cambridge,	432	83	15	2	More than four-fifths men.
Lowell,	289	44	50	6	Majority women and chil- dren.
Marlborough,	416	70	23	7	Seven-tenths men.
Natick,	374	75	20	5	Three-quarters men.
Somerville,	434	95	3	2	Nearly all men.
Waltham,	424	52	42	6	Majority men.
Woburn,	387	88	9	3	Nearly nine-tenths men.
COUNTY OF NORFOLK.					
Weymouth,	438	88	11	1	Nearly nine-tenths men.
COUNTY OF PLYMOUTH.					
Brockton,	482	78.8	21	.2	Nearly four-fifths men.
COUNTY OF SUFFOLK.					
Boston,	417	67	31	2	More than two-thirds men.
Chelsea,	414	68	30	.2	More than two-thirds men.
COUNTY OF WORCESTER.					
Clinton,	320	51	45	4	Majority men.
Fitchburg,	436	78	21	1	Nearly four-fifths men.
Milford,	385	82	15	3	More than four fifths men.
Spencer,	440	79	15	6	Nearly four-fifths men.
Worcester,	414	80	17	3	Four-fifths men.

The comparative profits and earnings in thirty-six cities and towns engaged in seven of the leading industries of the State are shown in the table which follows. The basis for similar showings for any industry in any city or town, or for comparison with the figures given in the Census of Massachusetts for 1875, can be obtained from the Census of Massachusetts for 1880, — the supplement to the Thirteenth Report of this bureau.

All the cities and towns engaged in these industries make a gross profit, but in many cases this gross profit is not equal to the sum of six per cent of the capital invested for

BOOTS AND SHOES.

	CITIES AND TOWNS.	Establishments.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
1	Haverhill, .	155	7,661	\$1,631,370	\$2,605,697	\$6,660,275	\$10,557,394	\$1,291,422
2	Lynn, .	174	10,708	4,263,250	4,931,530	12,918,221	20,946,867	3,097,296
3	Marlborough, .	23	3,278	854,100	1,357,283	3,353,163	5,169,356	458,910
4	Natick, .	33	1,537	741,100	631,747	2,092,077	3,062,509	338,685
5	Brockton, .	73	3,981	1,261,996	1,919,469	4,802,348	7,411,919	690,102
6	Worcester, .	59	2,404	1,750,508	1,148,432	3,011,077	4,703,705	544,196

COTTON GOODS.

1	Fall River, .	33	14,088	\$22,387,806	\$3,661,593	\$8,047,517	\$15,518,544	\$3,809,434
2	Lawrence, .	7	4,745	5,350,400	1,310,361	2,914,497	5,059,904	835,046
3	Holyoke, .	5	2,762	3,310,000	717,755	1,419,133	3,088,853	951,965
4	Lowell, .	8	11,679	10,796,265	2,885,827	7,729,257	14,345,890	3,730,806

LEATHER.

1	Lynn, .	23	768	\$910,100	\$408,618	\$1,657,763	\$2,309,272	\$242,891
2	Salem, .	52	910	1,167,050	463,454	3,487,973	4,209,004	257,577
3	Woburn, .	23	1,442	1,454,789	586,865	3,156,697	4,260,521	516,959
4	Boston, .	103	1,212	1,502,000	513,249	2,897,424	3,881,156	470,483

MACHINES AND MACHINERY.

1	Taunton, .	8	904	\$843,800	\$522,276	\$698,953	\$1,309,783	\$88,554
2	Lowell, .	33	1,732	1,160,760	818,680	1,022,846	2,268,599	427,073
3	Boston, .	125	3,448	4,583,333	1,867,207	2,603,646	5,950,628	1,479,775
4	Worcester, .	60	1,812	1,409,500	767,847	1,189,975	2,409,961	452,139

interest, and ten per cent of the value of product for expenses. The net loss thus indicated is not an actual loss, but simply shows that in certain cities and towns in the specified industries the interest and expenses as estimated must be in excess of the sums actually paid out for such purposes.

The comparatively large earnings shown in the woollen industry in the towns of Dedham and Millbury are probably due to the fact that in these towns a larger proportion of the operatives are males than in either of the other towns shown.

BOOTS AND SHOES.

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	
12.23	\$1,153,622	\$137,800	63.09	24.68	10.92	1.31	\$1,378	\$18.00	\$340	1
14.78	2,350,482	746,814	61.63	23.54	11.22	3.56	1,956	70.00	461	2
8.87	568,182	-109,272	64.87	26.26	10.99	-2.12	1,577	-33.00	414	3
11.05	350,717	-12,032	68.52	20.63	11.45	-.40	1,992	-8.00	411	4
9.31	816,912	-126,810	64.79	25.90	11.02	-1.71	1,862	-32.00	482	5
11.56	575,401	-31,205	64.02	24.42	12.23	-.67	1,957	-13.00	477	6

COTTON GOODS.

24.54	\$2,895,123	\$914,311	51.86	23.60	18.65	5.89	\$1,102	\$65.00	\$260	1
16.50	827,014	8,032	57.60	25.90	16.34	.16	1,068	2.00	276	2
30.81	507,485	444,480	45.95	23.24	16.42	14.39	1,118	161.00	259	3
26.00	2,082,365	1,648,441	53.88	20.12	14.51	11.49	1,228	141.00	247	4

LEATHER.

10.51	\$285,533	-\$42,642	71.79	17.70	12.36	-1.85	\$3,097	-\$56.00	\$532	1
6.11	490,923	-233,346	82.87	11.02	11.66	-5.55	4,625	-256.00	509	2
12.13	513,339	3,620	74.10	13.75	12.04	.09	2,955	3.00	407	3
12.12	478,236	-7,753	74.65	13.23	12.32	-.20	3,202	-6.00	423	4

MACHINES AND MACHINERY.

6.76	\$181,606	-\$93,052	53.36	39.88	13.86	-7.10	\$1,449	-\$103.00	\$579	1
18.82	296,506	130,567	45.08	36.10	13.07	5.75	1,310	75.00	473	2
24.86	870,063	609,712	43.75	31.39	14.62	10.24	1,726	177.00	542	3
18.75	325,566	126,573	49.38	31.87	13.50	5.25	1,330	70.00	424	4

METALS AND METALLIC GOODS.

	CITIES AND TOWNS.	Establishments.	Average number of employes.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
1	Attleborough, .	59	\$2,409	\$1,502,500	\$1,111,885	\$1,259,956	\$3,273,648	\$901,807
2	Taunton, .	33	1,759	1,722,650	753,453	1,750,807	2,864,313	557,993
3	Cambridge, .	51	764	541,850	315,546	777,696	1,272,020	178,778
4	Boston, .	458	5,066	4,544,713	2,295,267	4,446,827	8,366,748	1,624,554
5	Worcester, .	82	3,780	2,682,085	1,478,080	3,895,208	6,247,376	874,088

PAPER.

1	Lee, .	8	553	\$896,000	\$218,506	\$933,445	\$1,370,344	\$218,393
2	Holyoke, .	19	2,535	3,500,979	805,074	2,904,075	4,808,447	1,099,298
3	Springfield, .	8	703	576,500	192,382	1,289,877	1,676,974	194,715
4	Fitchburg, .	3	241	580,000	101,328	641,852	1,068,750	323,570

WOOLLEN GOODS.

1	North Adams, .	3	632	\$560,000	\$199,291	\$845,424	\$1,575,000	\$530,285
2	Pittsfield, .	9	1,433	1,645,000	460,525	1,562,123	2,656,694	634,041
3	Lawrence, .	3	2,797	3,050,000	896,855	2,160,031	3,823,380	766,494
4	Lowell, .	7	1,707	2,018,010	460,836	1,920,419	3,326,347	945,092
5	Dedham, .	3	629	1,278,500	257,294	601,043	1,143,227	284,890
6	Blackstone, .	5	509	540,000	146,922	651,781	1,025,511	226,808
7	Millbury, .	5	555	430,000	267,832	716,433	1,172,520	188,255
8	Uxbridge, .	6	541	590,000	180,711	676,345	1,078,998	221,942
9	Worcester, .	10	710	360,000	236,542	830,014	1,279,923	213,367

METALS AND METALLIC GOODS.

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.	
27.52	\$417,515	\$484,292	38.49	33.97	12.75	14.79	\$1,359	\$201 00	\$461	1
12.49	389,790	—31,797	61.13	26.38	13.60	—1.11	1,628	—18 00	429	2
14.05	159,713	19,065	61.14	24.81	12.55	1.50	1,665	25 00	413	3
19.41	1,109,358	515,196	53.15	27.44	13.25	6.16	1,652	102 00	453	4
13.99	785,603	88,425	62.35	23.66	12.57	1.42	1,653	23 00	391	5

PAPER.

15.94	\$190,794	\$27,599	68.12	15.94	13.92	2.02	\$2,478	\$50 00	\$395	1
22.87	690,904	408,394	60.39	16.74	14.36	8.51	1,897	161 00	318	2
11.61	202,287	—7,572	76.92	11.47	12.06	—45	2,385	—11 00	274	3
30.46	141,675	183,895	60.06	9.48	13.25	17.21	4,435	763 00	420	4

WOOLLEN GOODS.

33.66	\$191,100	\$339,185	53.68	12.66	12.13	21.53	\$2,492	\$537 00	\$315	1
23.86	364,369	269,672	58.80	17.34	13.71	10.15	1,854	188 00	321	2
20.04	565,338	201,156	56.50	23.46	14.78	5.26	1,367	72 00	321	3
28.41	453,715	491,377	57.73	13.86	13.64	14.77	1,949	288 00	270	4
24.91	191,032	93,858	52.59	22.50	16.70	8.21	1,818	149 00	409	5
22.11	134,951	91,857	63.56	14.33	13.15	8.96	2,015	180 00	289	6
16.05	143,052	45,203	61.10	22.85	12.20	3.85	2,113	81 00	483	7
20.56	143,300	78,642	62.60	16.75	13.28	7.28	1,994	146 00	334	8
16.67	149,592	63,775	64.85	18.48	11.68	4.99	1,803	90 00	333	9

For purposes of comparison of profits and earnings in 1875 and 1880 we supply the following presentation, which gives the facts for the State, the city of Boston, and for the State not including the city of Boston. All the values used from the census of 1875 are on the currency basis, gold in

THE STATE.

YEARS.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
1880, .	352,255	\$308,806,185	\$128,315,362	\$386,972,655	\$631,135,284	\$115,847,267
1875, .	308,963	282,683,718	146,159,826	294,963,575	592,331,962	151,208,561

BOSTON.

1880, .	56,813	\$42,750,134	\$23,715,140	\$77,586,607	\$123,366,137	\$22,064,390
1875, .	49,656	55,201,960	30,754,444	60,631,112	135,931,504	44,545,948

THE STATE, NOT INCLUDING BOSTON.

1880, .	295,442	\$261,056,051	\$104,600,222	\$309,386,048	\$507,769,147	\$93,782,877
1875, .	259,307	227,481,758	115,405,382	234,332,463	456,400,458	106,662,613

that year being at 1.12. To bring the values and averages for 1875 into exact comparison with those for 1880, they should be uniformly reduced 12 per cent, or about one-eighth. This must be borne in mind in the consideration of the remaining tables in this Part.

THE STATE.

YEARS.	Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employe.	Average yearly net profit per employe.	Average yearly earnings of each employe.
1880, .	18.55	\$81,341,900	\$34,505,367	61.32	20.33	12.88	5.47	\$1,792	98	364
1875, .	25.52	76,104,219	75,014,342	49.80	24.68	12.86	12.66	1,917	242	473

BOSTON.

1880, .	17.88	\$14,901,622	\$7,162,768	62.89	19.23	12.08	5.80	\$2,171	126	417
1875, .	32.77	16,905,268	27,640,680	44.60	22.63	12.44	20.33	2,737	556	619

THE STATE, NOT INCLUDING BOSTON.

1880, .	18.46	\$66,440,278	\$27,342,599	60.94	20.60	13.08	5.38	\$1,719	93	354
1875, .	23.37	59,288,951	47,373,062	51.34	25.29	12.99	10.38	1,760	183	445

An examination of the tables shows a falling off in the percentage of gross profit in 1880 as compared with 1875. In the State this falling off is 7.17 per cent; in Boston, 14.89 per cent; in the State, excluding Boston, 4.91 per cent. In the State, in 1880, the percentage of stock used had advanced 11.52 per cent; wages had been cut down 4.35 per cent; expenses had increased $\frac{2}{100}$ per cent, and net profit had fallen off 7.19 per cent. In other words, stock used cost 11.52 per cent more in 1880 than in 1875. To counterbalance this, wages were cut down 4.35 per cent, and the manufacturers lost 7.19 per cent, or 11.54 per cent.

	Years.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profit.
Pittsfield, . .	1880	2,247	\$2,465,015	\$725,826	\$2,644,584	\$4,343,655	\$973,245
	1875	2,066	2,413,780	815,946	1,978,091	4,073,672	1,279,635
Attleborough, .	1880	3,398	2,862,390	1,415,666	1,993,069	4,346,309	937,574
	1875	1,281	1,880,300	727,032	742,579	3,485,018	2,015,407
Fall River, . .	1880	16,488	24,252,586	4,312,105	10,014,981	18,978,776	4,651,690
	1875	16,827	23,494,471	5,988,224	10,672,145	24,668,505	8,008,136
New Bedford, .	1880	5,507	7,143,507	1,907,773	5,256,269	8,880,384	1,716,342
	1875	8,120	6,622,510	3,748,923	6,297,617	10,656,262	609,722
Taunton, . . .	1880	5,163	4,324,134	2,090,690	4,292,917	7,663,656	1,280,049
	1875	3,593	4,986,834	2,588,864	2,127,924	7,255,923	2,539,135
Beverly, . . .	1880	1,713	638,365	740,431	2,211,895	3,333,056	380,730
	1875	1,334	339,800	572,339	921,580	1,820,757	326,838
Haverhill, . .	1880	8,145	1,919,020	2,839,715	7,347,561	11,755,294	1,568,018
	1875	3,716	2,234,237	1,980,145	5,891,630	10,635,828	2,764,053
Lawrence, . .	1880	13,014	14,310,477	4,233,771	10,744,461	19,332,934	4,354,702
	1875	13,113	10,559,119	5,137,542	10,606,551	19,757,120	4,013,927
Lynn,	1880	12,446	5,882,350	5,823,572	15,551,938	25,216,778	3,841,268
	1875	10,559	5,197,095	5,297,435	10,250,951	21,011,427	5,463,041
Newburyport, .	1880	2,901	1,619,550	779,832	1,859,207	3,225,382	586,343
	1875	2,777	2,059,250	1,111,355	2,316,029	4,693,185	1,265,801
Peabody, . . .	1880	1,195	1,063,670	543,453	2,289,254	4,268,344	1,435,637
	1875	1,112	1,336,295	617,961	2,478,513	4,620,851	1,524,377
Salem,	1880	4,367	4,147,400	1,498,203	5,780,379	8,440,350	1,161,768
	1875	4,877	4,230,008	2,064,727	4,904,248	8,512,693	1,543,718
Chicopee, . . .	1880	3,411	4,141,650	986,533	2,309,049	4,222,015	926,433
	1875	3,521	2,051,673	1,570,965	2,340,918	4,035,040	123,157
Holyoke, . . .	1880	8,485	9,022,914	2,621,985	6,968,066	12,361,470	2,771,419
	1875	6,447	6,868,200	2,440,576	4,029,457	8,788,306	2,318,273

If we deduct the increase in expenses, $\frac{2}{100}$ per cent, we secure 11.52 per cent as the net loss to employers and employés. Boston's stock cost 18.29 per cent more in 1880 than in 1875; of this the employés bore 3.40 per cent, the employers 14.53 per cent, while $\frac{36}{100}$ per cent was gained on expenses. The State showing, with Boston excluded, can be analyzed in a similar manner. The results are quite near those for the State.

To show how this readjustment has taken place in our leading manufacturing cities and towns, we supply the following comparative table for 1875 and 1880, for thirty places:—

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employé.	Average yearly net profit per employé.	Average yearly earnings of each employé.
22.40	\$582,266	\$390,979	60.89	16.71	13.40	9.00	\$1,933	\$174 00	\$323
31.41	552,194	727,441	48.56	20.03	13.55	17.86	1,972	352 00	395
21.57	606,374	331,200	45.86	32.57	13.95	7.62	1,279	97 00	416
57.83	461,320	1,554,087	21.31	20.86	13.24	44.59	2,721	1,213 00	567
24.50	3,553,033	1,298,657	52.77	22.73	17.66	6.84	1,151	78 00	261
32.46	3,876,519	4,131,617	43.26	24.28	15.71	16.75	1,466	246 00	356
19.32	1,316,649	399,693	59.19	21.49	14.82	4.50	1,612	72 00	346
5.72	1,456,977	—847,255	59.10	35.18	13.67	—7.95	1,312	—104 00	462
16.70	1,025,814	254,235	56.02	27.28	13.38	3.32	1,484	49 00	404
34.99	1,024,802	1,514,333	29.33	35.68	14.12	20.87	2,019	421 00	721
11.42	371,608	9,122	66.36	22.22	11.15	.27	1,945	5 32	432
17.95	202,406	124,432	50.62	31.43	11.11	6.84	1,364	93 00	429
13.33	1,290,671	277,347	62.51	24.16	10.98	2.35	1,443	34 00	348
25.98	1,197,637	1,566,416	55.40	18.62	11.26	14.72	2,862	422 00	533
22.52	2,792,462	1,562,240	55.58	21.90	14.44	8.08	1,485	120 00	325
20.31	2,609,259	1,403,768	53.69	26.00	13.20	7.11	1,507	107 00	392
15.23	2,874,619	966,649	61.67	23.10	11.40	3.83	2,026	77 00	468
26.00	2,412,768	3,050,273	48.79	25.21	11.48	14.52	1,935	281 00	488
18.17	419,711	166,632	57.65	24.18	13.01	5.16	1,111	57 00	268
26.97	592,874	672,927	49.35	23.68	12.63	14.34	1,690	242 00	400
33.63	490,655	944,982	53.64	12.73	11.49	22.14	3,571	790 00	454
32.98	542,263	982,114	53.64	13.38	11.73	21.25	4,155	883 00	556
13.76	1,092,879	68,889	68.49	17.75	12.95	.81	1,932	15 00	343
18.13	1,105,070	438,648	57.61	24.26	12.98	5.15	1,745	90 00	423
21.94	670,701	255,732	54.69	23.37	15.88	6.06	1,237	74 00	289
3.05	526,604	—403,447	58.02	38.93	13.05	—10.00	1,146	—115 00	446
22.42	1,777,522	993,897	56.37	21.21	14.38	8.04	1,456	117 00	309
26.37	1,290,923	1,027,350	45.85	27.78	14.68	11.69	1,363	159 00	379

	Years.	Average number of employees.	Capital invested.	Wages paid during the year.	Stock used.	Value of product.	Gross profits.
Springfield, .	1880 1875	7,152 6,927	\$8,761,435 6,273,222	\$2,842,664 3,840,883	\$7,685,390 5,553,209	\$12,595,997 12,483,010	2,067,943 3,108,918
Cambridge, .	1880 1875	7,886 6,953	6,418,099 7,208,054	3,414,214 3,768,804	19,637,881 9,027,568	26,124,023 16,837,412	3,071,928 4,041,040
Lowell, . .	1880 1875	20,572 18,311	19,021,450 18,253,831	5,954,879 6,648,744	15,739,027 15,025,639	28,656,196 29,725,539	6,962,290 8,051,156
Natick, . .	1880 1875	1,994 1,068	1,013,550 494,600	747,524 606,069	2,415,182 1,699,405	3,595,749 2,736,973	433,043 431,499
Somerville, .	1880 1875	953 1,991	1,482,795 2,027,587	414,508 1,151,057	4,442,692 6,061,655	5,447,035 7,740,831	589,835 528,119
Waltham, . .	1880 1875	3,171 2,500	2,601,850 2,617,330	1,345,372 1,268,875	1,599,432 1,173,355	3,447,646 2,620,788	502,842 178,558
Woburn, . .	1880 1875	2,205 2,226	1,877,389 1,719,566	854,260 1,018,440	3,863,823 2,841,964	5,556,396 4,343,740	838,313 483,336
Weymouth, .	1880 1875	2,843 2,354	1,428,230 1,417,075	1,244,786 1,085,429	2,616,886 2,931,496	4,556,927 4,809,152	695,255 792,227
Brockton, . .	1880 1875	4,725 3,613	1,663,716 1,249,680	2,270,934 1,969,663	5,433,333 3,578,351	8,750,992 6,492,087	1,037,725 944,073
Boston, . .	1880 1875	56,813 49,656	42,750,134 55,201,960	23,715,140 30,754,444	77,586,607 60,631,112	123,366,137 135,931,504	22,064,390 44,545,948
Chelsea, . .	1880 1875	1,630 1,881	2,008,150 2,391,442	675,478 993,168	2,274,694 2,657,836	3,469,616 4,825,252	519,444 1,174,248
Clinton, . .	1880 1875	2,674 2,238	2,233,447 2,430,347	857,802 1,018,536	1,643,581 1,014,860	3,310,216 4,048,294	808,833 2,014,898
Fitchburg, .	1880 1875	2,283 2,626	2,527,451 3,564,680	997,270 1,367,831	2,633,898 2,709,734	4,597,578 5,827,391	966,410 1,749,826
Milford, . .	1880 1875	2,431 2,932	1,327,600 1,330,696	936,166 1,243,725	2,161,857 2,353,251	3,541,561 4,199,986	443,538 603,010
Spencer, . .	1880 1875	1,757 1,093	930,340 822,375	773,477 542,270	2,105,277 1,861,796	3,291,373 2,935,573	412,619 531,507
Worcester, .	1880 1875	14,332 10,770	10,101,904 11,218,165	5,932,921 5,901,745	15,021,324 11,721,738	24,758,457 23,496,767	3,804,212 5,873,284

Percentage of gross profit of value of product.	Estimated interest and expenses.	Net profit or loss.	Percentage of stock used of value of product.	Percentage of wages paid of value of product.	Percentage of interest and expenses of value of product.	Percentage of net profit or loss of value of product.	Average yearly product per employee.	Average yearly net profit per employee.	Average yearly earnings of each employee.
16.42	\$1,785,285	\$282,658	61.01	22.57	14.17	2.25	\$1,761	\$40 00	\$397
24.91	1,624,694	1,484,224	44.33	30.77	13.01	11.89	1,802	214 00	554
11.75	2,997,488	74,440	75.18	13.07	11.47	.28	3,312	9 43	432
24.00	2,116,224	1,924,816	53.62	22.38	12.56	11.44	2,422	277 00	542
24.29	4,006,907	2,955,383	54.92	20.79	13.98	10.31	1,303	143 00	289
27.08	4,067,784	3,983,372	50.55	22.37	13.68	13.40	1,623	218 00	363
12.04	420,388	12,655	67.17	20.79	11.69	.35	1,803	6 34	374
15.76	303,373	128,126	62.09	22.15	11.08	4.68	2,562	120 00	567
10.83	633,671	—43,836	81.56	7.61	11.63	—80	5,715	—46 00	434
6.82	895,738	—267,619	78.31	14.87	11.57	—4.75	3,888	—185 00	578
14.59	500,876	1,966	46.39	39.02	14.53	.06	1,087	62	424
6.81	419,119	—240,561	44.77	48.42	15.99	—9.18	1,048	—96 00	508
15.08	668,283	170,030	69.54	15.38	12.02	3.06	2,519	77 00	387
11.12	537,548	—54,212	65.43	23.45	12.37	—1.25	1,951	—24 00	458
15.25	541,387	153,868	57.43	27.32	11.88	3.37	1,603	54 00	438
16.47	565,940	226,287	60.96	22.57	11.77	4.70	2,043	96 00	461
11.85	974,922	62,803	62.09	26.06	11.14	.71	1,852	13 00	482
14.54	724,189	219,884	55.12	30.34	11.16	3.38	1,797	61 00	545
17.88	14,901,622	7,162,768	62.89	19.23	12.08	5.80	2,171	126 00	417
32.77	16,905,268	27,640,680	44.60	22.63	12.44	20.33	2,737	556 00	619
14.97	467,451	51,993	65.56	19.47	13.47	1.50	2,129	32 00	414
24.33	626,012	548,236	55.08	20.59	12.97	11.36	2,565	292 00	528
24.43	465,028	343,805	49.65	25.92	14.05	10.38	1,237	128 00	320
49.77	550,650	1,464,248	25.07	25.16	13.60	36.17	1,809	654 00	455
21.01	611,405	355,005	57.29	21.70	13.29	7.72	2,013	155 00	436
30.02	796,608	953,218	46.50	23.48	13.67	16.35	2,219	363 00	521
12.52	433,812	9,726	61.04	26.44	12.25	.27	1,456	4 00	385
14.35	499,840	103,170	56.03	29.62	11.90	2.45	1,432	35 00	424
12.53	384,958	27,661	63.97	23.50	11.69	.84	1,873	15 00	440
18.11	342,900	188,607	63.42	18.47	11.68	6.43	2,686	173 00	496
15.36	3,081,960	722,252	60.67	23.97	12.45	2.91	1,727	50 00	414
24.99	3,022,767	2,850,517	49.89	25.12	12.86	12.13	2,182	265 00	548

PART IV.

EARLY FACTORY LABOR IN NEW
ENGLAND.

PART IV.

EARLY FACTORY LABOR IN NEW ENGLAND.

The life of a people or of a class is best illustrated by its domestic scenes, or by character sketches of the men and women who form a part of it. The historian is a species of mental photographer; he can present only views of the life and times he attempts to portray. He can no more give the whole history of events than the artist or photographer can in detail bring a whole city into his picture. And so, in this brief record of a life that is past, I can give you but a few views of that long-ago faded landscape, — taken on the spot.

When I look back into the factory life of forty or forty-five years ago, I do not see what is called “a class” of young men and women going to and from their daily work, like so many ants that cannot be distinguished one from another, — I see them as individuals, with personalities of their own. This one has about her the atmosphere of her early home. That one is impelled by a strong and noble purpose. The other, — what she is, has been an influence for good to me and to all womankind.

Yet they were a class of factory operatives, and were spoken of (as the same class is spoken of now) as a set of persons who earned their daily bread, whose condition was fixed, and who must continue to spin and to weave to the end of their natural existence. Nothing but this was expected of them, and they were not supposed to be capable

of social or mental improvement. That they could be educated and developed into something more than mere work-people, was an idea that had not yet entered the public mind. So little does one class of persons really know about the thoughts and aspirations of another. It was the good fortune of these early mill-girls to teach the people that this sort of labor is not degrading; that the operative is not only "capable of virtue," but also capable of self-cultivation.

In what follows, I shall confine myself to a description of factory life in Lowell, Massachusetts, from 1832 to 1848, since, with that phase of Early Factory Labor in New England, I am the most familiar, — because I was a part of it.

In 1832, Lowell was little more than a factory village. Five "corporations" were started, and the cotton mills belonging to them were building. Help was in great demand and stories were told all over the country of the new factory place, and the high wages that were offered to all classes of work-people; stories that reached the ears of mechanics' and farmers' sons and gave new life to lonely and dependent women in distant towns and farm-houses. Into this Yankee El Dorado these needy people began to pour by the various modes of travel known to those slow old days. The stage-coach and the canal-boat came every day, always filled with new recruits for the army of useful people. The mechanic and machinist came, each with his home-made chest of tools and his wife and little ones. The widow came with her little flock and her scanty housekeeping goods to open a boarding-house or variety store, and so provided a home for her fatherless children. Troops of young girls came from different parts of New England, and from Canada, and men were employed to collect them at so much a head, and deliver them at the factories.

Some of these were daughters of professional men or teachers, whose mothers, left widows, were struggling to maintain the younger children. A few were the daughters of persons in reduced circumstances, who had left home "on a visit" to send their wages surreptitiously in aid of the family purse. And some were the granddaughters of patriots who had fought at Bunker Hill, and had lost the family

means in the war for independence. There were others who seemed to have mysterious antecedents, and to be hiding from something; and strange and distinguished looking men and women sometimes came to call upon them. Many farmers' daughters came to earn money to complete their wedding outfit, or buy the bride's share of housekeeping articles.

A very curious sight these country girls presented to young eyes accustomed to a more modern style of things. When the large covered baggage wagon arrived in front of a "block on the corporation" they would descend from it, dressed in various and outlandish fashions (some of the dresses, perhaps, having served for *best* during two generations) and with their arms brimful of handboxes containing all their worldly goods. These country girls, as they were called, had queer names, which added to the singularity of their appearance. Samantha, Triphena, Plumy, Kezia, Aseneth, Elgardy, Leafy, Ruhamah, Lovey and Florilla were among them. They soon learned the ways of the new place to which they had come, and after paying for their transportation they used their earnings to re-dress themselves, and in a little while they were as stylish as the rest. Many of them were of good New England blood, and blood tells even in factory people.

At the time the Lowell cotton mills were started the caste of the factory girl was the lowest among the employments of women. In England and in France, particularly, great injustice had been done to her real character. She was represented as subjected to influences that must destroy her purity and self-respect. In the eyes of her overseer she was but a brute, a slave, to be beaten, pinched and pushed about. It was to overcome this prejudice that such high wages had been offered to women that they might be induced to become mill-girls, in spite of the opprobrium that still clung to this degrading occupation. At first only a few came; others followed, and in a short time the prejudice against factory labor wore away, and the Lowell mills became filled with blooming and energetic New England women. They were naturally intelligent, had mother wit, and they fell easily into the ways of their new life. They soon began to

associate with those who formed the community in which they had come to live, and were invited to their houses. They went to the same church, and sometimes, perhaps, married into some of the best families. Or, if they returned to their secluded homes again, instead of being looked down upon as "factory girls," by the squire or the lawyer's family, they were more often welcomed, coming from the metropolis, bringing new fashions, new books and new ideas with them.

The early mill-girls were of different ages. Some were not over ten years old; a few were in middle life, but the majority were between the ages of sixteen and twenty-five. The very young girls were called "doffers." They "doffed," or took off, the full bobbins from the spinning-frames, and replaced them with empty ones. These mites worked about fifteen minutes every hour and the rest of the time was their own. When the overseer was kind they were allowed to read, knit, or go outside the mill-yard to play. They were paid two dollars a week. The working hours of all the girls extended from five o'clock in the morning until seven in the evening, with one half-hour each, for breakfast and dinner. Even the doffers were forced to be on duty nearly fourteen hours a day. This was the greatest hardship in the lives of these children. Several years later a ten-hour law was passed, but not until long after some of these little doffers were old enough to appear before the legislative committee on the subject, and plead, by their presence, for a reduction of the hours of labor.*

Those of the mill-girls who had homes generally worked from eight to ten months in the year; the rest of the time was spent with parents or friends. A few taught school during the summer months. Their life in the factory was made pleasant to them. In those days there was no need of advocating the doctrine of the proper relation between employer and employed. *Help was too valuable to be ill-treated.* If these early agents, or overseers, had been disposed to exercise undue authority, the moral strength of the

* In 1847, or about that date, on invitation of William Schouler, a member of the legislature from Lowell, several mill-girls went before the Legislative Committee on the Hours of Labor, then sitting at the State House, to represent the interests of the Lowell operatives on this question.

operatives, and the fact that so many of them were women, would have prevented it. A certain agent of one of the first corporations in Lowell (an old sea captain), said to one of his boarding-house keepers: "I should like to rule my help as I used to rule my sailors, but so many of them are women I do not dare to do it."

Except in rare instances, the rights of the mill-girls were secure. They were subject to no extortion, and if they did extra work they were always paid in full. Their own account of labor done by the piece was always accepted. They kept the figures, and were paid accordingly. Though their hours of labor were long, yet they were not overworked. They were obliged to tend no more looms and frames than they could easily take care of, and they had plenty of time to sit and rest. I have known a girl to sit twenty or thirty minutes at a time. They were not driven. They took their work-a-day life easy. They were treated with consideration by their employers, and there was a feeling of respectful equality between them. The most favored of the girls were sometimes invited to the houses of the dignitaries of the mills, and thus the line of social division was not rigidly maintained.

The agents and overseers were usually married men, with families of growing sons and daughters. They were members, and, sometimes, deacons of the church, and teachers in the same Sunday school with the girls employed under them. They were generally men of moral and temperate habits, and exercised a good influence over the help. The feeling that the agents and overseers took an interest in their welfare caused the girls, in turn, to feel an interest in the work for which their employers were responsible. The conscientious among them took as much pride in spinning a smooth thread, drawing in a perfect web, or in making good cloth, as they would have done if the material had been for their own wearing. And thus was practised, long before it was preached, that principle of true political economy,—the just relation, the mutual interest that ought to exist between employers and employed.

At first the mill-girls had but small chance to acquire book learning. But evening schools were soon established,

and they were well filled with those who desired to continue their scant education, or supplement what they had learned in the village school or academy. Here might often be seen a little girl of ten puzzling over her sums in Colburn's Arithmetic, and at her side another "girl" of fifty poring over her lesson in Pierpont's National Reader. In 1836 or thereabouts, a law was made by several corporations which compelled every child under fourteen years of age, to go to school three months in the year. And then the little doffers (and I was one of them) had another chance to nibble at the root of knowledge.

Some of these evening schools were devoted entirely to one particular study. There was a geography school in which the lessons were repeated in unison in a monotonous, sing-song tone. There was also a school where those who fancied they had thoughts were taught by Newman's Rhetoric to express them in writing. In this school the relative position of the subject and the predicate in a sentence was not always well taught by the master; but never to mix a metaphor or to confuse a simile was a lesson he firmly fixed in the minds of his pupils.

Life in the boarding-houses was very agreeable. These houses belonged to the corporation, and were usually kept by widows (mothers of some of the mill-girls), who were often the friends and advisers of their boarders. Each house was a village or community of itself. There fifty or sixty young women from different parts of New England met and lived together. When not at their work, by natural selection they sat in groups in their chambers, or in a corner of the large dining-room, busy at some agreeable employment. They wrote letters, read, studied, or sewed, for, as a rule, they were their own seamstresses and dress-makers.

These boarding-houses were considered so attractive that strangers, by invitation, often came to look in upon them, and see for themselves how the mill-girls lived. Dickens, in his *American Notes*, speaks with surprise of their home-life. He says, "There is a piano in a great many of the boarding-houses, and nearly all the young ladies subscribe to circulating libraries." There was a certain class

feeling among these households; any advantage secured to one of the number was usually shared by others belonging to her set or group. Books were exchanged; letters from home were read, and "pieces," intended for the Improvement Circle were presented for friendly criticism. They stood by each other in the mills. When one wanted to be absent half a day, two or three others would tend an extra loom or frame apiece, so that the absent one might not lose her pay. At this time the mule and spinning-jenny had not been introduced, and two or three looms, or spinning-frames, were as much as one girl was required to tend. More than that was considered "double work."

The society of one another was of great advantage to these girls. They discussed the books they read; debated religious and social questions; compared their thoughts and experiences, and advised and helped one another. And so their mental growth went on and they soon became educated far beyond what their mothers or their grandmothers could have been. It may be well to mention here that there were a few of the mill-girls, who came to Lowell solely on account of the social or literary advantages to be found there. They lived in secluded parts of New England, where books were scarce, and there was no intelligent society. They had comfortable homes, and did not, perhaps, need the *money* they would earn, but they longed to see

"This wonderful city of spindles and looms,
And thousands of factory folks."

And the fame of the circulating libraries that were soon opened drew them and kept them there, when no other inducement would have been sufficient. I knew one who spent her winters in Lowell for this very purpose. She was addicted to novel-reading, and read from two to four volumes a week. While she was at her work in the mill, the children of the family where she boarded were allowed to read the books. It was as good as a fortune to them. For six and a quarter cents a week the novels of Richardson, Madame D'Arblay, Fielding, and Smollett could be devoured by four hungry readers.

The early mill-girls were omnivorous readers of the few

magazines and newspapers. From an article on this phase of the subject in the *Offering* — “Our Household,” I am able to quote a sketch of one factory boarding-house interior. The author said, — “In our house there are eleven boarders, and in all thirteen members of the family. I will class them according to their religious tenets as follows: Calvinist, Baptist, Unitarian, Congregational, Catholic, Episcopalian, and Mormonite, one each; Universalist and Methodist, two each; Christian Baptist, three. Their reading is from the following sources: — They receive regularly fifteen newspapers and periodicals. These are, the *Boston Daily Times*, the *Herald of Freedom*, the *Signs of the Times* and the *Christian Herald*, two copies each; the *Christian Register*, *Vox Populi*, *Literary Souvenir*, *Boston Pilot*, *Young Catholic's Friend*, *Star of Bethlehem* and the *Lowell Offering*, three copies each. A magazine [perhaps the *Dial*] one copy. We also borrow regularly the *Non-Resistant*, the *Liberator*, the *Ladies' Book*, the *Ladies' Pearl* and the *Ladies' Companion*. We have also in the house what perhaps cannot be found anywhere else in the city of Lowell, — a Mormon Bible.”

It is well to consider, for a moment, some of the characteristics of the early mill-girls. We have seen that they were necessarily industrious. They were also frugal and saving. It was their custom the first of every month, after paying their board bill (\$1.25 a week), to put their wages in the savings bank. There the money stayed, on interest, until they withdrew it, to carry home or to use for a special purpose. In 1843 over one-half of the depositors in the Lowell Institution for Savings were mill-girls, and over one-third of the whole sum deposited belonged to them, — in round numbers, \$101,992. It is easy to see how much good such a sum as this would do in a rural community where money, as a means of exchange, had been scarce. Into the barren homes many of them had left, it went like a quiet stream, carrying with it beauty and refreshment. The mortgage was lifted from the homestead; the farmhouse was painted; the barn rebuilt; modern improvements were introduced into the mother's kitchen, and books and newspapers began to ornament the sitting-room table.

Young men and women who had spent their two or three years of probation in the Lowell Mills, often returned to the old place, bought land, built their modest houses, and became new and prosperous heads of families. Some of the mill-girls helped maintain widowed mothers, or drunken, incompetent, or invalid fathers. Many of them educated the younger children of the family and young men were sent to college with the money furnished by the untiring industry of their women relatives.

The most prevailing incentive to labor was to secure the means of education for some *male* member of the family. To make a *gentleman* of a brother or a son, to give him a college education, was the dominant thought in the minds of a great many of the better class of mill-girls. I have known more than one to give every cent of her wages, month after month, to her brother, that he might get the education necessary to enter some profession. I have known a mother to work years in this way for her boy. I have known women to educate young men by their earnings, who were not sons or relatives. There are many men now living who were helped to an education by the wages of the early mill-girls.

It is well to digress here a little, and speak of the influence the possession of money had on the characters of some of these women. We can hardly realize what a change the cotton factory made in the status of the working women. Hitherto woman had always been a money *saving* rather than a money earning, member of the community. Her labor could command but small return. If she worked out as servant, or "help," her wages were from 50 cents to \$1.00 a week; or, if she went from house to house by the day to spin and weave, or do tailoress work, she could get but 75 cents a week and her meals. As teacher, her services were not in demand, and the arts, the professions, and even the trades and industries, were nearly all closed to her.

As late as 1840 there were only seven vocations outside the home into which the women of New England had entered.* At this time woman had no property rights. A

* According to the Census of 1880 the women of Massachusetts are now employed in 284 branches of industry, including the arts and professions.

widow could be left without her share of her husband's (or the family) property, an "incumbrance" to his estate. A father could make his will without reference to his daughter's share of the inheritance. He usually left her a home on the farm as long as she remained single. A woman was not supposed to be capable of spending her own, or of using other people's money. In Massachusetts, before 1840, a woman could not, legally, be treasurer of her own sewing society, unless some man were responsible for her.

The law took no cognizance of woman as a money-spender. She was a ward, an appendage, a relict. Thus it happened, that if a woman did not choose to marry, or, when left a widow, to re-marry, she had no choice but to enter one of the few employments open to her, or to become a burden on the charity of some relative.

In almost every New England home could be found one or more of these women sitting "solitary" in the family; sometimes welcome, more often unwelcome; leading joyless and, in many instances, unsatisfactory lives. The cotton factory was a great opening to these lonely and dependent women. From a condition of almost pauperism they were placed at once above want. They could earn money and spend it as they pleased. They could gratify their tastes and desires without restraint and without rendering an account to anybody.

At last they had found a place in the universe, and were no longer obliged to finish out their faded lives a burden to their male relatives. Even the *time* of these women was their own, on Sundays, and in the evening, after the day's work was done. For the first time in this country the labor of woman, as a class, had a money value. She had become not only an earner and producer, but also a spender of money; a recognized factor in the political economy of her time.

The history of Lowell gives a good illustration of the influence of women, as an independent class, upon the growth of a town or a community.

As early as 1836, ten years after its incorporation, Lowell began to show what the early mill-girls and boys could do

towards the material prosperity of a great city. It numbered over 17,000 inhabitants, — an increase of over 15,000 during that time.

The old Middlesex Canal, opened in 1797, had long since ceased to accommodate the growing traffic. The stage-coach could not fetch and carry fast enough, and, in 1835, the Boston and Lowell Railroad, the first enterprise of the kind in the United States, went into operation. Churches and schoolhouses were building, and the new-made city showed unmistakable signs of becoming, what it has since been called, the “Manchester of America.” But the money of the operatives alone could not have so increased the growth and social importance of a city or a locality. It was the result, as well, of the successful operation of the early factory system, managed by men who were wise enough to consider the physical, moral, and mental needs of those who were the source of their wealth.

The early mill-girls were religious by nature and by Puritan inheritance. On entering the mill, each one was obliged to sign a “regulation paper,” which required her to attend regularly some place of public worship. They were of many creeds and beliefs. In one boarding-house, that I knew, there were girls belonging to eight different religious sects.

In 1843, there were in Lowell, fourteen regularly organized religious societies. Ten of these constituted a Sabbath School Union, which consisted of over five thousand scholars and teachers; three-fourths of the scholars, and a proportion of the teachers, were mill-girls. Once a year, every fourth of July, this Sabbath School Union, each section, or division, under its own sectarian banner, marched in procession to the grove on Chapel Hill, where a picnic was held, with lemonade, and long speeches by the ministers of the different churches. The mill-girls went regularly to meeting and Sabbath School, and every Sunday the streets of Lowell were alive with neatly-dressed young women, going or returning therefrom. Their fine appearance on the Sabbath was often spoken of by strangers visiting Lowell.

Dr. Scoresby, in his *American Factories and their Oper-*

atives, holds up the Lowell mill-girls as an example of neatness and good behavior to their sister operatives of Bradford, England. Indeed, it was a pretty sight to see so many wide-awake young girls, in the bloom of life, clad in their holiday dresses.

It is refreshing to remember their simplicity of dress; they wore no ruffles and very few ornaments. It is true that some of them had gold watches and gold pencils, but they were worn only on grand occasions. As a rule the early mill-girls were not of that class that is said to be "always suffering for a breast-pin." Though their dress was so simple and so plain, yet it was so fitting that they were often accused of looking like ladies. And the complaint was sometimes made that no one could tell the difference in *church*, between the factory girls and the daughters of some of the first families in the city.

The morals of the early mill-girls were uniformly good. The regulation paper, before spoken of, required each one to be of good moral character, and if any one proved to be disreputable, she was at once turned out of the mill. Their standard of behavior was high, and the majority kept aloof from those who were suspected of wrong-doing. They had, perhaps, less temptation than the working-girls of to-day. They were not required to dress beyond their means; and comfortable homes were provided by their employers, where they could board cheaply. Their surroundings were pure, and the whole atmosphere of their boarding-houses was as refined as that of their own homes. They expected men to treat them with courtesy; they looked forward to becoming the wives of good men. Their attitude toward the other sex was that of the German *fräulein*, who said, "Treat every maiden with respect, for you do not know whose *wife* she will be."

The health of the early mill-girls was good. The regularity and simplicity of their lives and the plain and substantial food provided for them kept them free from illness. From their Puritan ancestry they had inherited sound bodies and a fair share of endurance. Fevers and similar diseases were rare among them, and they had no time to pet small ail-

ments. The boarding-house mother was often both nurse and doctor, and so the physician's fee was saved. There was, at that time, but one *pathy* to be supported by the many diseases "that flesh is heir to."

Their reformatory spirit is worthy of mention. They were subscribers to the newspapers, and it was their habit, after reading their copies, to send them by mail to their widely scattered homes, where they were read all over a village or a neighborhood.

By reading the weekly newspapers the girls became interested in public events. They knew all about the Mexican war, and the anti-slavery cause had its adherents among them. Lectures on the doctrine of Fourier were read, or listened to, and some of them were familiar with, and discussed the Brook Farm experiment.

Mrs. Bloomer, that pioneer of the modern dress reform, found followers in Lowell; and parlor meetings were held at some of the boarding-houses to discuss the feasibility of this great revolution in the style of woman's dress.

One of the first strikes that ever took place in this country was in Lowell in 1836. When it was announced that the wages were to be cut down, great indignation was felt, and it was decided to strike or "turn out" *en masse*. This was done. The mills were shut down, and the girls went from their several corporations in procession to the grove on Chapel Hill, and listened to incendiary speeches from some early labor reformers.

One of the girls stood on a pump and gave vent to the feelings of her companions in a neat speech, declaring that it was their duty to resist all attempts at cutting down the wages. This was the first time a woman had spoken in public in Lowell, and the event caused surprise and consternation among her audience. One of the number, a little girl eleven years old, had led the turn-out from the room in which she worked. She was a "little doffer," and they called her a ring-leader.

It is hardly necessary to say that, so far as practical results are concerned, this strike did no good.

The corporations would not come to terms. The girls

were soon tired of holding out, and they went back to their work at the reduced rate of wages. The ill-success of this early attempt at resistance on the part of the wage element seems to have made a precedent for the issue of many succeeding strikes.

It seems to have been the fashion of the early mill-girls to appear in procession on all public occasions. Mr. Cowley, in his *History of Lowell*, speaks of President Jackson's visit to that city in 1833.

He says: "On the day the president came, all the lady operatives turned out to meet him. They walked in procession, like troops of liveried angels clothed in white [with pink parasols], with cannons booming, drums beating, banners flying, handkerchiefs waving, etc. The old hero was not more moved by the bullets that whistled round him in the battle of New Orleans than by the exhilarating spectacle here presented."

This is but the brief story of the life of a class of common every-day work people; such as it was then, such as it might be to-day. The Lowell mill-girls were but a simple folk, living in Arcadian simplicity as was the fashion of the times. They earned their own bread, and often that of others. They eked out their scant education by their own efforts, and read such books as were found in the circulating libraries of the day. They sought to help one another. They tried to be good, and to improve their minds. They were wholly untroubled by conventionalities or thoughts of class distinctions, dressing simply, since they had no time to waste on the entanglements of dress. Such were their lives. Undoubtedly there must have been another side of this picture, but I give the side I knew best—the bright side!

It now remains for me to speak of the intellectual tendencies of a portion of the early mill-girls. Their desire for self-improvement had been to a certain extent gratified, and they began to feel the benefit of the educational advantages which had been opened to them. They had attended lyceum lectures, learned what they could at the evening schools, and continued their studies during their

yearly vacations, or while at their work in the mill. I have known one girl to study Greek and Latin, and another algebra, while tending her work. Their labor was monotonous and done almost mechanically, but their thoughts were free, and they had ample time to digest what they learned, or think over what they had read. Some of these studious ones kept note-books, with abstracts of their reading and studies, or jotted down what they were pleased to call their "thoughts." Many of the pieces that were printed in the *Lowell Offering* were thought out amid the hum of the wheels, while the skilful fingers and well-trained eyes of the writers tended the loom or the frame. It was natural that such a studious life as this should bear some fruit, and this leads me to speak of the *Lowell Offering* just mentioned, a publication that may be called the natural outgrowth of the mental habit of the early mill-girls. The first number of this unique magazine was issued in October, 1840, the last in December, 1849. There are seven volumes in all. The story of its publication is as follows: The Rev. Abel C. Thomas and the Rev. Thomas B. Thayer, pastors of the first and second Universalist Churches in Lowell, had established improvement circles composed of the young people belonging to their respective parishes. These meetings were largely made up of young men and women who worked in the mill. They were often asked to speak, but as they persistently declined, they were invited to write what they desired to say, and send it, to be read anonymously at the next meeting. Many of the young women complied with this request, but it is recorded that the young men were of "no great assistance." These written communications were so numerous that they very soon became the sole entertainment of what Mr. Thomas called "these intellectual banquets."

It may be said, that these improvement circles were not the first formed among the early mill-girls. In 1836 there was one composed entirely of young girls who worked on the Lawrence corporation, who thus, according to their constitution, "desired to improve the talents God had given" them. This may, perhaps, be called the first woman's

club on record. In 1843 there were at least five of these improvement circles, composed entirely of mill-girls.

A selection from the budget of articles read at their circles, was soon published by Mr. Thomas and Mr. Thayer in pamphlet form and called the *Lowell Offering*. These gentlemen conducted the *Offering* two years, and then it passed into the hands of Miss Harriet Farley and Miss Harriot F. Curtis, both operatives in the Lowell mills. Under their joint editorship it lasted until it was discontinued for want of means, and perhaps new contributors. All the articles in the *Offering* were written by mill-girls. In speaking of this matter, its first editor, Mr. Thomas, says: "Communications much amended, in process of training the writers, were rigidly excluded from print, and such articles only were published as had been written by females employed in the mills." He continues, "and thus was published not only the first work written by factory girls, but also the first magazine or journal written exclusively by women in all the world."

The *Offering* was a small, thin magazine, with one column to the page. On the outside cover, in 1845, it had for a vignette, a young girl simply dressed, with feet visible and sleeves rolled up. She had a book in one hand and her shawl and bonnet were thrown over her arm. She was represented as standing in a very sentimental attitude, contemplating a bee-hive at her right hand. In the background, as if to shut them from her thoughts, was a row of factories. At first the motto was:

"The worm on the earth
May look up to the star."

This was rather an abject motto, and was not suited to the independent spirit of most of the contributors, and a better one was soon adopted, from Gray, — the verse beginning:

"Full many a gem of purest ray serene."

It finally died under the motto:

"Is Saul also among the prophets?"

The *Lowell Offering* was welcomed with pleased surprise. It found subscribers all over the country. The *North*

American Review, whose literary *dictum* was more autocratic than it is to-day, endorsed it, and expressed a fair opinion of its literary merit. It said:—

“Many of the articles are such as to satisfy the reader at once, that if he has only taken up the *Offering* as a phenomenon, and not as what may bear criticism and reward perusal, he has but to own his error, and dismiss his condescension as soon as may be.”

Other leading magazines and journals spoke favorably of its contributions. It made its way into lonely villages and farm-houses and set the women to thinking, and thus added its little leaven of progressive thought to the times in which it lived. It found subscribers in England. Dickens read it and praised its writers.* Harriet Martineau prompted a fine review of it in the *London Athenæum*, and a selection from its pages was published, under her direction, called *Mind Among the Spindles*.

It is not necessary to speak here of the literary merits of the articles in the *Lowell Offering*. They are the crude attempts of those who were but children in literature, and the wonder is that what they wrote is half so good as it is.

These factory-girl writers did not confine their talents within the pages of their own publication. Many of them wrote for the literary newspapers and magazines. One sometimes filled the poet's corner in *Zion's Herald*; another took that envied place in the *Ladies' Casket*; a third sent poetic effusions to the *Lowell Courier and Journal*.†

* When Dickens visited this country, in 1842, he went into the Lowell factories and a copy of the *Offering* was presented to him. He speaks of it as follows:—“They have got up among themselves a periodical, called the *Lowell Offering*, whereof I brought away from Lowell four hundred good solid pages, which I have read from beginning to end. Of the merits of the *Lowell Offering*, as a literary production, I will only observe—putting out of sight the fact of the articles having been written by these girls after the arduous hours of the day—that it will compare advantageously with a great many English annuals.”

† William Schouler, of the *Lowell Journal*, published the *Offering* in 1845, and his young sub-editor, William S. Robinson, afterwards well known by his *nom de plume* of “Warrington,” wrote favorable notices of the magazine, and when he could do so without letting “the editor step aside to make way for the friend,” sometimes admitted its writers into the columns of that leading Whig newspaper. It may be added here, that this gentleman, in his zeal for the writers of the *Lowell Offering*, went so far as to take one of the least known among them as his companion for life.

In 1848, eight books had been published, written by contributors to the *Lowell Offering*.

Though the literary character of these writings may not rise to the present standard of such productions, yet still at that season of intellectual dearth they must have had a certain influence on the literature of the land. And, without claiming too much credit for the authors, it is but fair that some attempt should be made, as another has said, "to reveal the halo which should extend to us from this representative body of New England women."

These authors represent what may be called the poetic element of factory life. They were the ideal mill-girls; full of hopes, desires, aspirations; poets of the loom, spinners of verse, artists of factory life.

The names of the *Lowell Offering* writers, so far as I have been able to recall them, are as follows: Harriot F. Curtis and Harriet Farley, (the editors from 1842 to 1849), Harriet Lees, Lucy Larcom and Emeline Larcom (sisters), Lura, Louisa and Maria Currier (sisters), Margaret Foley, Lydia S. Hall, Sarah E. Martin, J. L. Baker, Abba Goddard, Harriet Jane Hanson, M. Bryant, Laura Tay, Jane S. Welch, Sarah Shedd, M. R. Green, Mary A. Leonard, Ellen M. Smith, M. A. Dodge, Caroline Whitney, E. W. Jennings, Betsey Chamberlain, Eliza J. Cate, A. H. Winship, Hannah Johnson, Mrs. Kimball, Adeline Bradley, L. A. Choate, A. E. Wilson, Sarah Bagley, Alice A. Carter, J. B. Hamilton, E. E. Turner, A. D. Turner (sisters), and Kate Clapp. Many of the writers signed fictitious names,—such as Ella, Adelaide, Dorcas, Aramantha, Stella, Kate, Oriana, Ruth Rover, Ione, and Annaline. Lucy Larcom, M. Bryant, Harriet Farley, Margaret Foley, and Lydia S. Hall were the poets of the magazine. Lucy Larcom published her first poem in the *Offering*, in 1842. It was called *The River*. It is almost superfluous to say that Miss Larcom and Miss Foley long since became celebrated: one as a poet, and the other as a sculptor of rare merit.

In her poem, *An Idyl of Work*, Miss Larcom, in her most graceful and popular style, tells the story of her life as a Lowell factory girl. Harriot F. Curtis was a prolific writer for newspapers and magazines under the pseudonym

of "Minnie Myrtle" (a *nom de plume* afterwards appropriated by a Mrs. Anna C. Johnson, for which see Wheeler's *Dictionary of Noted Names of Fiction*). Miss Curtis published a book called *S. S. Philosophy*, and two popular novels, — *Kate in Search of a Husband*, and *Jessie's Flirtations*. This last still holds its original place in the advertising list of Harper's Select Library of Novels, and in 1882 was republished. Harriet Farley wrote and published several books. Harriet J. Hanson Robinson published in 1877, *Warrington Pen Portraits* and in 1881, *Massachusetts in the Woman Suffrage Movement*.

But there were representative women among the mill-girls who were not writers for the *Offering*. This was but one phase of their development. Many of them have exerted a wide-spread influence in other directions. They went forth from their *Alma Mater*, the Lowell factory, carrying with them the independence, the self-reliance taught in that hard school, and they have done their little part towards performing the useful labor of life. Into whatever vocation they entered they made practical use of the habits of industry and perseverance learned during those early years.

Skilled labor teaches something not to be found in books or in colleges. Their early experience developed their characters, and, like good blood, told in them, and helped them to fight well the battle of life.

In order to show how far the influence of individuals belonging to such a class of work-people may extend, it will be well to mention the after-fate of some of the early mill-girls. One became an artist of note, another a poet of more than local fame, a third an inventor, a fourth one of the foremost advocates of woman's rights; a fifth, the founder of a free public library in her native town.* A sixth went to Mexico as wife of a major-general in the army of that republic. It is said that this officer was at one time acting president of the republic, and that his factory-girl wife revelled for a space "in the halls of the Montezumas." A few became teachers, authors, and missionaries. A great many married into the trades and professions. Some went West with their

* Sarah Field, of Washington, N. H.

husbands, took up land, and did their part towards settling that vast region. A limited number married those who were afterwards doctors of divinity and members of congress. It may be said here that at one time the fame of the *Lowell Offering* caused the mill-girls to be considered very desirable for wives; and young men came from near and far to pick and choose for themselves, and generally with good success.

These women were all self-made in the truest sense, and it is well to mention their success in life, that others, who now earn their living at what is called "ungenteel" employments, may see that what one does is not of so much importance as what one is. I don't know why it should not be just as commendable for a woman who has risen to higher employments, to have been once a factory-girl, as it is for an ex-governor and major-general to have been a "bobbin-boy." A woman ought to be as proud of being self-made as a man, — not proud, in a boasting way, but proud enough to assert the fact in her life and in her works.

In this brief sketch of early factory life I have tried to show that it was the means of education to a large class of men and women, who, without the opportunity thus afforded, could not have become developed, and their influence on modern civilization would have been lost. In short, that New England itself, and perhaps the whole country, would not have been what it is to-day, but for the influence of these early cotton mills, managed as they were by an enlightened factory system. Thousands of unknown men and women who once earned their living in this way, have settled in different sections of the country. These old factory girls and old factory boys are to be found everywhere, in all classes and in all vocations, and they ought to be as proud of their dear old *Alma Mater* as the Harvard graduates are of their college.

It is often said that the life described cannot be repeated, and that the modern factory operative is not capable of such development. If this is a fact, may there not be a reason for it? The factory of to-day ought to be as much of a school to those who work there as it was to the operative of forty years ago. The class may be different, but the chances of education should correspond to its needs. The same results,

perhaps, cannot be reached, because the children of New England ancestry had in them some germs of intellectual life. But is it not also possible that the children of the land of Thomas Moore, of Racine and of Goethe may be something more than mere clods? I do not despair of any class of artisans or operatives. There is among them all some germ of mental vigor, some higher idea of living, waiting for a chance to grow. The same encouragement on the part of employers, the same desire to lift them to a higher level, would soon show of what the present class of operatives is capable.

Last winter, 1881, I was invited to speak to a company of the Lowell mill-girls, and tell them something about my early life as a member of the guild. I was the more willing to do this, as I was desirous of forming some estimate with regard to the status of the successors of the early mill-girls.

About two hundred of them assembled in the pleasant parlors of the People's Club, and listened attentively to my story. When it was over, a few of them gathered around and asked me many questions. In turn I questioned them; about their work; their hours of labor; their wages, and their means of improvement. When I urged them to occupy their spare time in reading and study, they seemed to understand the necessity of it, but answered sadly: "We will try; but we work so hard, we tend so much machinery, and we are so tired." It was plainly to be seen that these operatives did not go to their labor with the jubilant feeling that the old mill-girls used to have, that their work was drudgery, done without aim and purpose, that they took no interest in it beyond the thought that it was the means of earning their daily bread. There was a tired hopelessness about them that I am sure was not often seen among the early mill-girls.

The wages of these operatives are much lower, accordingly, than of old, and though the hours of labor are less, they are obliged to do a far greater amount of work in a given time. They tend so many looms and frames that they have no time to think. They are always on the jump. They have no time to improve themselves, nor to spend in helping others. They are too weary to read good books,

and too overworked to digest what they have read. The souls of these mill-girls seemed starved, and looked from their hungry eyes, as if searching for mental food.

Why are they not fed? The means of education are not wanting. Public libraries are provided, but *good* books remain unopened, and are not read by them. They have more leisure than the mill-girls of forty years ago, but they do not know how to improve it. Their leisure only gives them the more time to be idle in; more time to waste in the streets, or in reading cheap novels and stories. They are almost worse off than if they worked more hours or did not know how to read, since they can use to advantage neither their extra time nor the means of education provided for them. Let it not be understood that I would take from the operative or the artisan, one of the chances of education. But I would have them taught how to use wisely those privileges, forced, we might almost say, on them and on their children. I would also have them taught how to inwardly digest what they are made to learn.

The factory population of New England is made up largely of American-born children of foreign parentage. As a rule, they are not under the control of the church of their parents, and they adopt the vices and follies, rather than the good habits of our people. It is vital to the interests of the whole community, that this class should be kept under good moral influences; that it should have the sympathy, the help of employers. This class needs better homes than it finds in too many of our factory towns and cities. It needs a better social atmosphere. It needs to be lifted out of its mental squalor into a higher state of thought and of feeling.

“Labor is worship,” says the poet. Labor is education, is the teaching of the wise political economist.

If factory labor is not a means of education to the operative of to-day, it is because the employer does not do his duty. It is because he treats his work-people like machines, and forgets that they are struggling, hoping, despairing human beings. It is because, as he becomes rich, he cares less and less for the well-being of his poor, and beyond

paying them their weekly wages, has no thought of their wants or their needs.

The manufacturing corporation, except in comparatively few instances, no longer represents a protecting care, a parental influence over its operatives. It is too often a soulless organization, and its members forget that they are morally responsible for the souls and bodies, as well as the wages of those whose labor is the source of their wealth. Is it not time that more of these Christian men and women, who gather their riches from the factories of the country, should begin to reflect that they do not discharge their whole duty to the operatives when they see that the monthly wages are paid; and that they are also responsible for their unlovely surroundings, for their barren and hopeless lives, and for the moral and physical destruction of their children?

Would it not be wise for more employers to consider, seriously, whether it is better to degrade this class of people to a level with the same class in foreign countries, or to mix a little conscience with their capital, and so try to bring the "lost Eden" I have tried to describe, back into the life of the factory operative of to-day?



